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EXPERIENCED TEACHERS' PERCEPTIONS AND PREFERENCES CONCERNING OFF-CAMPUS UNIVERSITY COURSES AND SCHOOL DISTRICT-SPONSORED IN-SERVICE EDUCATION ACTIVITIES IN THE PROVINCE OF ALBERTA

by

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A THESIS
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE
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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled EXPERIENCED TEACHERS' PERCEPTIONS AND PREFERENCES CONCERNING OFF-CAMPUS UNIVERSITY COURSES AND SCHOOL DISTRICT-SPONSORED IN-SERVICE EDUCATION ACTIVITIES IN THE PROVINCE OF ALBERTA submitted by GLORIA VICTORIA BURKE in partial fulfilment of the requirements for the Degree of Doctor of Philosophy.

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Date October 6, 1980

ABSTRACT

The present study was designed to determine the effectiveness of off-campus university courses and school district-sponsored in-service activities in meeting the in-service expectations of experienced teachers. Prior to the accomplishment of this purpose, several tasks were undertaken.

A questionnaire and an interview guide, based on the conceptual framework, were developed and used to collect data for the study. Elements of the conceptual framework included 7 ideals, 7 goals, 8 instructional activities and 14 objectives. These were identified in the review of the literature.

Experienced teachers' perceptions and preferences with regard to the ideals, goals and instructional practices as they pertain to in-service education were derived from statistical analysis of the data. Their perceptions concerning participation in organizing in-service programs, and their perceptions with regard to the effectiveness of off-campus university courses and school district-sponsored in-service activities were similarly identified.

The study sample included 120 experienced teachers selected from 5 stratified random off-campus university centres within the Province of Alberta, Canada. There were 24 participants from each of the 5 centres.

The findings of this study which related to six sub-problems included: (a) experienced teachers perceived each of the 7 ideals (what ought to be) of in-service education to be of great importance; (b) dealing with individual differences among students, producing teachers who can be versatile in using a variety of teaching techniques, and producing teachers who can integrate theory with practice, were top ranking ideals; (c) of the seven goals of in-service education, respondents perceived off-campus university courses to be stressing: knowledge, versatility and interpersonal competence, (d) school district-sponsored in-service activities, in their view, stressed versatility, application, and adaptation; (e) of the 8 instructional activities, respondents perceived listening to lectures and watching demonstrations, discussing topics and issues, and working in groups, as activities which lend themselves a great deal to meeting in-service education objectives; (f) respondents indicated a preference for less time to be devoted to listening to lectures and watching demonstrations, but displayed preference for an allotment of more time to the remaining 7 activities; (g) respondents perceived themselves as having little input in organizing off-campus university courses and school district-sponsored in-service activities; (h) they displayed preference for more input; (i) the study sample perceived the 2 contexts of in-service education to range between "moderately effective" and "quite effective" in assisting them to meet 12 of the 14 in-service objectives; (j) both contexts of in-service education were perceived to range between "somewhat effective" and "moderately effective" in assisting experienced teachers to meet the remaining 2 objectives.

Succinctly, the results of this investigation pointed to the existence of a gap between experienced teachers' perceptions and preferences concerning off-campus university courses and school district-sponsored in-service activities. One may infer from these results that there exists a need for cooperative and rational planning of in-service education programs.

Implications for planning in-service teacher education programs, implications for educational administration, and implications for future research are discussed. Several suggestions are made for future research in the area of in-service teacher education.

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CHAPTER 1

INTRODUCTION AND STATEMENT OF THE PROBLEM

There has been great emphasis on the in-service education of teachers within recent years. This has been prompted by the onset of decline in the demand for pre-service teacher education (Powell, 1974:13); the need for teachers to cope with innovations and disequilibrium (Ingram, 1972); and declining enrolments in schools which have reduced the availability of jobs and the mobility of teachers.

The stagnation of teaching personnel due to lack of employment opportunities within the profession has created the need for teachers to retrain and accept jobs in areas of specialization other than those for which they were initially prepared (Altmann et al., 1979). Other factors that have necessitated the continuing education of teachers include innovations in teaching such as competency-based training, Learning Activity Packages, the stress on teacher-accountability, changes in the content of curricula, new teaching methods and new vocational requirements. In addition, are other factors mentioned by Altmann et al. (1979), namely, the complexity of learning, evaluating the learning task, and the assessment of teacher effectiveness.

In-service or continuing education may be perceived as salutary to members of the teaching procession as it represents a means of upgrading the job-related aspect of teachers' education so that they may cope appropriately with technological, societal, and educational changes. It is intended to expand the professional base of teachers (Hosford et al., 1975:4), and to help them acquire skills beyond the entry level into the profession. In the view of Westbury (1975:106) in-service education may be viewed as potentially the most important and effective means of helping teachers acquire professional information and learn alternative teaching strategies. As a process, Westbury affirms, in-service education enables school systems to generate their self-renewing capacity and thus fulfil their obligation to society in general. According to Cogan (1975:213-229) in-service education serves to remedy the severe insufficiency of pre-service education. Bishop (1974:3) has argued that it builds on staff competencies, while Harris and Bessent (1969:16) have noted that it contributes to organizational changes.

In-service education is devised to meet the professional needs of teachers throughout their careers (Warwick, 1975:26), and is likely to have a greater impact than the sum total of pre-service preparation (Stewart, 1966:3). It must be viewed as the first stage of a lifelong process of professional development (Altmann et al., 1979) and as a period of more extensive professional involvement than the pre-service and induction phases of a teacher's career. In-service education is the continuing stage of a lifelong process of professional development. Consequently, it ought to be directed to practical problems and situations which are not vicarious.

Teachers teach other professionals but unfortunately their in-service education does not parallel what occurs in other professions. Cogan (1975:213-229) explains this point quite clearly in the comment that established professions require their practitioners to continue their education throughout their careers in order to gain new knowledge and new competencies, and thus avoid lapsing into obsolescence. Horowitz (1978) has endorsed Cogan's comment in his assertion that other professions such as law, nursing, accounting, dentistry, medicine, pharmacy, and engineering are committed to lifelong education. A number of the professions enumerated by Horowitz also require that their professionals undergo a period of in-service education after a lapse of three or five years in order to have their licenses renewed. Education, unlike industry and business, does not make personnel training and upgrading an intergral part of its program, hence for a great part, job-related in-service is left to the individual (Altmann et al., 1979).

Westbury (1975:69) has noted that the preparation of teachers is a continuous process which extends from college experience throughout teachers' professional careers. This statement is endorsed by Larson (1962:6) in his rationale for in-service education of teachers. Larson comments that, "in-service education of teachers in the profession is based on the idea that professional growth is continuous, and self-improvement is continuously possible." This notion of self-improvement equips the teacher to respond to the changing needs of the educational enterprise (Bishop, 1976:19) and thus become aware of the availability of diverse opportunities open to members of the profession.

Warwick (1975:26) has enumerated opportunities which may be derived from in-service education:

1. opportunities for participants to evaluate their work and attitudes in conjunction with their professional colleagues,
2. opportunities for participants to develop professional competence and confidence, and
3. opportunities for participants to acquire relevant knowledge and skills in order to assess their own teaching roles in relation to a changed society, and to equip their students to

cope with change.

The opportunities specified by Warwick indicate that in-service education promotes professional discussion and innovations. It contributes to the development of proficiency in preparing, selecting and utilizing learning resources (UNESCO, 1976:106) and it enables teachers to keep current technically and professionally. Succinctly, in-service education maintains and contributes to teacher effectiveness. The opportunities outlined by Warwick also extend the definitions of in-service education proposed by Hass (1957), Cane (1969), Hosford et al. (1975), Cogan (1974), and Yarger and Brannigan (1979). For Cogan (1974; in Regan, 1975:220):

> . . . in-service education of teachers is commonly understood to include the collegiate and school-based programs of professional study and work in which the teacher has been involved after he has been certificated and employed.

The definition enunciated by Cane (1969) is similar in perspective to Cogan's. For Cane, in-service education includes all courses and activities in which a serving teacher may participate for the purpose of extending his professional knowledge, interest or skill subsequent to graduation. Cane has pointed out that his definition includes preparation for a degree, diploma or other qualification. Hosford et al. (1975:4) and Yarger and Brannigan (1979) have summarized Cane's definition in their enunciation of in-service education. In the view of Hosford and associates, in-service education as a process extends the professional development of teachers who are in full-time employment, and Yarger and Brannigan (1979:1) have noted that in-service education must be designed to serve and help practising professionals in the execution of professional tasks.

The foregoing definitions of in-service education suggest that certain constraints are associated with the concept. It is related to professional study and maintenance of teachers after certification; it must extend the knowledge, interest and skill of practising teachers; it must contribute to effective job performance, and one may add that it must result in positive teacher change. Despite the constraints, in-service education is multidimensional in scope and lends itself to a variety of concepts. Joyce, Howey, and Yarger (1976) have classified five contexts of in-service education as:

1. Job-embedded activities: In these activities the teacher learns by interacting with others on the job. Committee membership, team-teaching and consultation are examples.
2. Job-related activities: These activities encompass training which is related to the job. Workshops, teacher exchanges, and teachers' centres are included.
3. Professional organization-related activities: Conferences conventions, reading professional magazines, and any other activity which is sponsored by a teachers' organization fall within this group of activities.
4. Credential-oriented activities: A non-credit or credit university or further education course is classified as a credit-oriented activity.
5. Self-directed activities: These encompass sabbatical leave and release-time activities.

MacKay (1964) has classified these contexts as individual and group activities. For Cane (1969) the contexts represent award-bearing and non-award bearing pursuits.

NEED FOR THE STUDY

Variations in content and purpose, a multidimensional delivery format, and multifaceted aspects of in-service education are suggested in the contexts of in-service education. They also imply that teachers' interests, needs, and preferences vary, and ought to be given due consideration in the organization and implementation of in-service education. Thus, the question as to what are the perceptions and preferences of experienced teachers concerning off-campus university courses and school district-sponsored in-service activities in relation to meeting their in-service needs, and in contributing to their effectiveness in the classroom, is the stimulus of this investigation.

The question has arisen from the incertitude of benefits derived from these two contexts of in-service education, by teachers. In addition is the inconclusiveness of evidence concerning the effects of these two contexts of in-service education in which teachers are frequently involved. For example, it has been argued that teacher's attitudes are more likely to be influenced positively in school-based rather than in college-based in-service activities (Lawrence, 1974). It has also been asserted that school-based in-service activities are more effective in producing change in skills on the part of the teacher (Boschee and Hein, 1980). Another view is that teachers display significant preferences for college-based activities because they are regarded as useful (Betz et al., 1978).

Hopgood (1975:2), commenting specifically on sessional courses, has noted that the main processes used invite limitations which are associated with classroom teaching and public lectures. Mawby (1972:6) has argued that universities pay lip service to the concept of lifelong education. This, Jackson (1974; cited in Powell, 1974:5) maintains, has resulted in their provision of "unexciting" and "sterile" programs. Powell (1974) has described such programs as a "smorgasbord" of meaningless courses. McComas (1972:5) has added that university programs are characterized by discontinuity, the absence of long-range planning, and lack of clear focus on educational problems identified by teachers. In his comment on the failure of universities to plan for heterogeneous groups, Turner has maintained that universities plan the same materials for teachers regardless of their level of experience. Dillon (1978) has summarized these assertions by arguing that universities are not particularly successful with providing faculty with effective in-service education services. Perhaps the short-comings of universities with regard to the provision of viable in-service programs for experienced teachers are linked to the fact that they unwittingly deliver the locus of control of continuing teacher education either to the individual teacher or to school districts at the end of the pre-service phase of the teacher's education. Clegg (1975) has, however, failed to support assertions concerning the lack of contributions made to the in-service education of experienced teachers by universities. He has commented that universities and colleges can admirably discharge some educational tasks in sessional courses. He also has maintained that such courses bring together whole staffs with common concerns, and provide opportunities which facilitate mutual learning of new aids and methods.

In discussions of school district-sponsored in-service activities two schools of thought exist. Thurber (1975:4) has noted that school district-sponsored activities permit teachers to identify and articulate their own teaching needs. Lawrence (1974) has added that school-based activities offer teachers a choice of goals, and as a consequence, provide substantial benefit to them. Such activities, Lawrence concludes, prove beneficial because they are linked to a central effort of the school, rather than being single programs which are not part of the general development. McNamara (1975) has noted that in-service programs provide a medium through which teachers keep current in innovations and new teaching techniques.

Rubin (1971:245) has contended that in-service programs are inimical to the professional growth of teachers. He has maintained that administrators view in-service education as a routine and futile exercise, while teachers have grown to view it as impotent. Rubin concluded that in-service education has been a lost cause. It lacks systematic methodology and it has been managed with astonishing clumsiness.

Immegart and Pilecki (1973:93) contend that administrators have ignored the concept of linkages and collegiality in organizing in-service education for teachers. These authors have argued that little is done to relate in-service activities to particular teachers' needs. They maintain that administrators assume that teachers need certain types of courses or activities, and such programs are planned and offered to the teachers without due consultation with them as participants. Romano (1977) has supported the discussion concerning lack of teacher input in in-service education. This author has argued that in-service education has failed due to lack of teacher input, and lack of communication between those who plan and those who attend. Similar to Romano, Kryzanowski

(1980) fails to support the notion of guardianship which becomes evident when teachers have no input in the planning and organizing of in-service education. Kryzanowski, in outlining the goals of education for the 80s, has affirmed that in-service programs are successful when based on the principle of teachers using their own experience to teach others.

In his discussion of school district-sponsored in-service programs, Turner (1970) has noted that teachers have grown to denounce the efforts of central office staff as being ineffective, irrelevant, inappropriate, inconsequential and inelastic. He feels that great numbers of teachers deplored in-service programs foisted upon them, and he believes that because teachers are not consulted with regard to in-service offerings, such programs often are unrelated to teachers' perceived needs.

The issues connected with school district-sponsored in-service activities and college-based programs gave rise to the problem outlined in this study. Furthermore, a search of ERIC and other available literature revealed that only a limited number of studies have been conducted in the area of teachers' perceptions and preferences concerning in-service education. No study, to this researcher's knowledge, has focused on experienced teachers' perceptions and preferences with regard to in-service education offered to this group of teachers through off-campus university courses and school district-sponsored in-service activities in the Province of Alberta, Canada.

It is anticipated that this study will contribute to in-service teacher education by adding to existing knowledge in in-service education. In addition, it is hoped that the information which is provided by this study will (a) serve to guide administrators in planning, coordinating, organizing, and implementing in-service programs for experienced teachers, (b) assist administrators in identifying the type of resources which best meet the needs of experienced teachers, and (c) aid in establishing linkages among experienced teachers, school district administrators and off-campus university course coordinators.

THE PROBLEM

The problem for research was to determine the effectiveness of off-campus university courses and school district-sponsored in-service activities in fulfilling the in-service expectations which experienced teachers in the Province of Alberta hold for them. This problem gave rise to six sub-problems.

Sub-problems

1. What are the perceived ideals of in-service teacher education?
2. How important are the real goals of off-campus university courses and school district-sponsored in-service activities as perceived by experienced teachers?
3. To what extent do the instructional activities utilized in off-campus university courses and school district-sponsored in-service activities lend themselves to meeting the objectives of in-service education?
4. What are the perceptions and preferences of experienced teachers as regards time allotted to various instructional activities utilized in off-campus university courses and school district-sponsored in-service activities?
5. What are the perceptions and preferences of experienced

teachers as regards their participation in organizing off-campus university courses and school district-sponsored in-service activities?

6. How effective are off-campus university courses and school district-sponsored in-service activities in contributing to improving the performance of experienced teachers on the job?

PURPOSES OF THE STUDY

In brief one purpose of the study was to determine the perceptions and preferences of experienced teachers concerning ideals, real goals, instructional practices, and teacher participation in organizing off-campus university courses and school district-sponsored in-service activities. A second purpose was to evaluate the effectiveness of off-campus university courses and school district-sponsored in-service activities and, based on the findings to make recommendations for the planning of future in-service programs.

DELINEATION OF THE STUDY

Delimitations

1. This study was restricted to school district-sponsored in-service activities and off-campus university courses offered to experienced teachers in the Province of Alberta, Canada. Other aspects or contexts of in-service education do not fall within the scope of this study.
2. This study investigated the preferences and perceptions of only 120 experienced teachers who took courses from 5 University of Alberta off-campus centres, and generalizations

will be limited to the areas studied.

3. The literature search was limited to the fields of educational administration, organizational effectiveness, organizational change, and in-service teacher education.
4. The study is descriptive and exploratory. It describes the perceptions and preferences of experienced teachers in the Province of Alberta, concerning off-campus university courses and school district-sponsored in-service activities, and attempts to gain new insights.

Limitations

1. The responses from the 120 subjects who participated in the study reflect only their feelings at the time of completing the questionnaire or during the interview. As Baumel (1967:28) has noted, in the interpretation of survey results, the researcher must bear in mind that the opinion expressed on a questionnaire is only an opinion expressed at one point in time. It is not necessarily a commitment of the respondent's part to support a certain issue should it be brought to his attention again.
2. The findings from which generalizations are drawn are based on the perceptions and preferences of only experienced teachers who have taken off-campus university courses and have participated in school district-sponsored in-service activities.
3. Constraints in satisfying teachers' needs is another limitation; thus the preference may not be realizable in

practice due to lack of resources such as time and personnel. Cane (1969:30) has, however, asserted that establishing the patterns of perceptions and preferences of teachers may prove worthwhile for future planning.

4. A further limitation is that teachers possess different outlooks, needs, goals and abilities. Therefore, such human variations might have a bearing on differences in respondents' perceptions or preferences even if they are placed in the same situation, such as participating in similar off-campus university courses and school district-sponsored in-service activities.

ASSUMPTIONS

In this investigation, two assumptions were made. The first was that objectivity would be achieved, and the perceptions and preferences of respondents, despite possible bias, would provide new insights. The second assumption was that respondents would accurately and willingly report their perceptions and preferences concerning off-campus university courses and school district-sponsored in-service activities.

DEFINITION OF TERMS

Operational definitions of the important terms used in this study are provided in this introductory chapter.

University course. A period of study of approximately three and one half or seven months' duration involving three hours of lectures each week may be regarded as a university course. A seven-month or full session course lasts from September to April, while a semester or a three and one half course lasts from either September to December or from January to April. For the purpose of this study, a university course may also be described as a "college-based" course.

Off-campus university course. This term denotes a credit course offered by the University of Alberta in the evenings or on week-ends at prescribed centres outside the coporate limits of Edmonton. The term off-campus university course is used interchangeably with the term course, in this study.

Teacher. In this study, the term teacher denotes an individual who has obtained formal teacher education at a university or college, who holds an interim or permanent certificate issued by the Department of Education in the Province of Alberta, and who is involved in instruction in a public or separate school within the Province of Alberta.

Practising teacher. The term practising teacher refers to a teacher who has one or more years of teaching experience. This term is used interchangeably with experienced teacher.

School district. In this study, the term school district is operationalized to mean any number of schools operating under a single jurisdiction or board. This term, in consequence, embraces the notion of school division or county.

In-service education. This term denotes individually planned and/or institutionally planned activities for improvement of instruction in schools and/or the professional development of teachers. In this study, the term in-service education embraces all job-related and credential-oriented activities in which a teacher participates. In-service education may also be defined as continuing teacher education. Both terms are used synonymously in this study.

School district-sponsored in-service activity. This term denotes any activity which is organized by the school district or by teachers within the school district for the purposes of professional development. Such an activity may be regarded as "school-based" for the purposes of this study. The term activity is used synonymously with school district-sponsored in-service activity in this study.

Preference. In this study, preference is defined as that which the respondents regard as ideal or what ought to occur in a school district-sponsored in-service activity or off-campus university course in which they have participated. This was obtained from the Teacher Questionnaire (TQ) that was administered.

Perception. This term refers to what the respondents regard as real or what is actually occurring or not occurring in the school district-sponsored in-service activity or off-campus university course in which they have been involved. Teachers' Perceptions were obtained from the Teacher Questionnaire (TQ) that was administered.

In-service Program. In this study the term in-service program embraces the terms off-campus university course and school district-sponsored in-service activities.

ORGANIZATION OF THE DISSERTATION

This section of the chapter gives an overview of the organization of this dissertation.

The first chapter contains a brief outline of the research area, the statement of the problem, the purposes of the study, definition of terms, the delineation of the study, the need for the study, and assumptions related to the area of research.

Chapter 2 presents a review of related literature from which key concepts were identified to form the conceptual framework for the study. In this chapter an in-service education model propounded by Harris and Bessent is examined for the purposes of the study. The Harris-Bessent model is finally adapted and concepts which were identified in the literature were combined to form the analytical framework for this investigation.

Chapter 3 presents an outline of the research design and methodology. In this chapter, a description of the instrument used for data collection and the criteria for subject participation in the study are presented. The method of data collection and data analysis are also outlined in this chapter.

Chapter 4 focuses on the analysis, interpretation and discussion of the data with regard to goals of off-campus university courses and school district-sponsored in-service activities, and to the ideals of in-service education.

Chapter 5 focuses on an analysis, interpretation, and discussion of the data concerning off-campus university courses.

Chapter 6 presents an analysis, interpretation, and discussion of the findings relating to school district-sponsored in-service education activities.

In chapter 7, the final chapter, the study is summarized and a number of conclusions and implications are presented.

SUMMARY

In this chapter, an introduction to the problem for research, the problem statement, purposes of the study, delineation of the study, assumptions, definitions of terms, and the need for the study were presented. An outline of the chapters of the dissertation was also given.

CHAPTER 2

LITERATURE REVIEW - TEACHERS' PERCEPTIONS AND PREFERENCES CONCERNING IN-SERVICE EDUCATION

One purpose of this chapter is to review studies that have been done on teachers' perceptions and preferences in relation to in-service education. The studies are reviewed chronologically in order to highlight the critical issues, in this area, which have emerged at various points in time. From the studies reviewed, key concepts are selected to form part of the conceptual framework. A second purpose of this chapter is to discuss the Harris-Bessent model which was adapted to serve as the analytical framework for the study.

Research Studies

Statements concerning the inappreciable benefits derived from participants in in-service education programs, the gallimaufry of activities or courses, the incompatibility of continuing education programs with the needs of teacher-participants, and the failure of administrators and educators to devise acceptable and functional in-service education for teachers, are abundant in the literature. Cane (1969:4-5) for example, conducted a survey on the views and preferences of teachers concerning in-service education in England and Wales and found that though there was strong professional support for in-service education, there were reservations with regard to the types of courses provided and the method of organization.

According to Cane's report, 50 percent of the teachers evaluated in-service education as being limited in content, methodology and purpose. More than 50 percent declared that there was a shortage of the kinds of courses they wished to attend. Many teachers felt that the courses provided seemed to have little reference to the hard, practical realities of teaching. Teachers felt that they were not consulted sufficiently with regard to the organization of in-service education. Cane reported that participants in in-service programs claimed that they had not shared their expertise or systematized their collective experience in a coherent way. They viewed themselves as working in isolation.

In the same study (Cane, pp. 22-23), it was found that teachers displayed a preference for courses which dealt with teaching methods, teaching aids, and the development of new schemes for teaching. The latter preference is described as innovativeness which Schachtel (1959; cited in Milstein and Belasco, 1973:440) has defined as the invention of new procedures, the introduction of diversity, growth and change, and more differentiation as a system strives to maintain its health and moves towards new goals. Cane's investigation was based on in-service education in general.

During the same decade in which Cane's study was conducted, three studies on in-service education were conducted in the Province of Alberta, Canada. Two of these reported the views and preferences of teachers. One study was conducted by Larson (1962), the second was by Stewart (1966), and the third by Naciuk (1968).

Larson evaluated in-service education in the School Divisions and Counties of Alberta. He found that university extension (off-campus) courses rated fourteenth out of fifteen activities. Institutes rated first in promoting professional competence. Larson also found that respondents placed a high priority on activities which related to the study of classroom problems. Certain suggestions were made by the respondents with regard to the improvement of in-service education:

1. in-service education must be based on needs;
2. more time should be available to teachers for in-service;
3. opportunities available for accomplishment of in-service objectives were lacking;
4. in-service programs should be cooperatively planned;
5. in-service should involve group effort;
6. teachers should take a greater interest in promoting in-service activities; and
7. factors limiting the effectiveness of in-service education were deficiencies in resources such as time, instructional personnel, and appropriate literature.

Larson incorporated the respondents' suggestions in his recommendations in which he stressed that the evaluation of in-service in both procedures and practice should be considered, and that provision should be made for the interpretation of both purpose and objectives in in-service education.

Stewart (1966) substantiated some findings of Cane and of Larson. This investigator, who studied the in-service opportunities available to beginning teachers in the Province of Alberta, reported that beginning teachers expressed the view that in-service education programs should be concerned with helping teachers to develop competence in classroom procedures. Desired competencies, Stewart contended, related to the use of teaching aids, the acquisition of desirable evaluative and curricular skills and the development of self-evaluative techniques. Stewart reported that respondents in his study placed a high priority on objectives which were directly concerned with classroom procedures, and those which were related to technical and practical competence. Stewart reiterated Larson's findings that opportunities designed to accomplish these objectives were not widely available.

The third Alberta study was conducted by Naciuk (1968) who sought to analyze the effectiveness of a Mathematics 20 methods in-service course. This investigator did not report the perceptions or preferences of teachers concerning in-service programs. Instead, he recommended that more in-service programs, designed to provide teachers with a variety of teaching methods, were desirable. He asserted that teachers' repertoire of methods may be enlarged through in-service. This recommendation is similar to views expressed by the respondents in Stewart's (1966) study.

In the 1970s there were other studies in the area of in-service education, conducted in the Province of Alberta. These studies are discussed chronologically.

Harder (1970) assessed the difference in effectiveness of an institute type in-service education program, an individualized program, and a no treatment program to orient beginning industrial arts teachers to a new curriculum. He found that the mean scores of the two groups which had received treatment were higher than those of the control group; that in-service education contributed to the growth of teachers by helping them to become more effective in achieving set objectives; that younger subjects in each group showed more growth; that the more education subjects had, the more effective in-service programs were for producing growth, and that experience contributed very little to the growth or performance components of the groups. Harder concluded that the institute was more successful in achieving defined objectives than the individualized treatment approach.

Schreiber (1975) focused on the in-service preferences of social studies teachers and administrators in the Province of Alberta. He reported that respondents claimed that in-service education placed too much emphasis on theory, and provided too little opportunity for exchange of ideas among participants concerning the resolution of day to day problems encountered in the classroom. The respondents in his study expressed preferences for in-service education which provided opportunities for teachers to keep up-to-date with new philosophies and materials, and for activities which bear some relationship to classroom instruction. This finding in Schreiber's study endorsed the findings of Stewart (1966) and supported Naciuk's (1968) recommendations.

Westbury (1975) developed an in-service education curriculum development model with a view to (a) improving teacher competency in program development and (b) improving the in-service education process through the involvement of educators at all levels, within the school system, in a major project. Westbury's model which consisted of five components -- needs, objectives, activities, evaluation, and accountability, was used cooperatively by administrators and "lead teachers" to guide them in implementing in-service programs offered to teachers within selected schools in Edmonton, Alberta, Canada.

Westbury found that the use of the model helped teachers to develop a positive attitude toward central office personnel. He reported that teachers found the sessions related to needs, activities, and objectives rewarding, but perceived the sessions relating to accountability and evaluation less valuable. Westbury asserted that the lead teacher concept is a feasible method to develop change agents at the school level. He recommended that specific areas in curriculum development be delineated for presentation to teachers, in the planning of in-service programs.

The model developed by Westbury supported opinions based on the use of models in in-service education. His study strengthened the notion that in-service education ought to be a synergetic venture which involves teachers and administrators.

In 1978, three studies in the area of in-service education were conducted in the Province of Alberta. The first of these studies was a professional development needs survey conducted by the Edmonton Public School Board. From a list of 41 suggested topics, teachers displayed preference for activities which related to the development of teaching strategies, selection of teaching aids, curriculum planning, and pupil evaluation. All these findings are similar to what Stewart (1966) found in his investigation.

Finlay (1978) applied the factors of feedback, participation, continuity, readiness, and relevance in designing an in-service program for teachers of environmental education in Alberta. Finlay concluded that (a) the individual's perceptions influence the prioritizing of many aspects and strategies of in-service programs, (b) the benefits of using a participatory approach include the motivation of the participant, and (c) the effectiveness of an in-service program is maximized when participants are involved.

The final Alberta study of the 1970s was that of Altmann, Herman and Clapp (1979). This study investigated the preferences of a group of teachers in Calgary, Alberta, concerning in-service education offerings. The major finding was that teachers wanted in-service education, but showed preference for activities which focused on how to motivate students, and on the development of curricular, evaluative and managerial skills.

Parellel to the Alberta studies of the eighth decade of the twentieth century on teacher perceptions and preferences concerning in-service education, were studies conducted in the United States of America. Zigarmi, Betz and Jensen (1977) focused on the perceptions and preferences of teachers concerning in-service activities. Osborne and Bowling (1977) sought to determine views and preferences of mathematics teachers concerning in-service education. Yarger and Brannigan (1979) focused on the perceptions and preferences of teachers concerning university courses, and Hein and Boschee (1980) studied the effectiveness of an in-service workshop.

The study of Zigarmi and associates (1977) revealed that teachers prefer courses that are related to current trends and innovativeness. Preferences were also expressed for courses which possessed a common area and built on teahcers' interests, as well as courses which provided for peer interaction. Respondents were reported to have placed priority on courses that were held on the university campus. The researchers concluded that observations, assistance from other teachers, and workshops designed around local needs, should be included in in-service education. More time, in their view, should be allocated to carrying out initial in-service activities, and for planning follow-up activities which help teachers extend and apply what they learned. Useful in-service, the researchers asserted, starts with the assumption that teachers can share ideas and be resources for one another. In addition, Zigarmi, Betz, and Jensen (1977) maintained that teachers are more committed to in-service education if they have been involved in planning, and feel that they have control over their own in-service experience. This conclusion implies that in-service education for teachers ought to occur close to the action, be concrete, be teacher-specific, ought to focus on practical problems, should involve teachers in process decisions, and ought to include classroom assistance.

Osborne and Bowling (1977) found that teachers felt their in-service courses did not respond to classroom needs. The courses were viewed as poorly planned and too theoretical. The program was deemed too general and the content was sparse. In addition, teachers perceived that materials used in in-service sessions were too expensive for practical classroom purposes; that instructors were often unfamiliar with the classroom setting and therefore failed to understand teachers' problems; that teachers were not permitted to participate in in-service planning; and that frequently the same theme was repeated.

In the same survey, Osborne and Bowling reported that 83 percent of the teachers felt that the ideal method of organizing in-service programs was to have an administrator from the school who is directly responsible for it. Fifty-two percent of the respondents in this study felt that it was desirable for the school district to bring in a resource person from the university. The researchers concluded that teachers needed in-service education, but the proviso was that it should be related to their needs.

The study conducted by Yarger and Brannigan (1979) revealed that teachers exhibited preference for university courses which were conducted by the lecture format and which focused on content. Each of the three age groups, 20-25, 26-55 and 56-65, significantly preferred the 15-week 2-hour courses, and the researchers reported that respondents claimed that they chose courses on the basis of need and interest rather than on the level of challenge.

Yarger and Brannigan found that experienced teachers participated in off-campus university courses to develop skills in teaching methods. Their preferred modes of instruction were workshops and seminars. The criteria used by experienced teachers to evaluate off-campus university courses were: relevance to the job; expertise of instructors, relationship between course and personal objectives; and the amount of interaction among participants. The experienced teachers who participated in the Yarger-Brannigan study preferred courses that were planned cooperatively. Respondents in the age group of 46-65 years favoured courses that followed the lecture format. According to the researchers, the 20-25 age group selected being able to meet socially with colleagues as one of the main reasons for their participating in off-campus university courses. Yarger and Brannigan recommended that courses be designed to improve the teaching skills for the 46-65 age group, that information concerning successful and highly accepted courses be disseminated, and that the cooperation of school districts be sought in order to design courses that meet the needs of individual schools.

In their evaluation of an in-service workshop, Boschee and Hein (1980) reported that the ineffectiveness of the in-service workshop arose from its being college-based, from too much focus on the teaching of skills rather than on conceptual objectives, and from the workshop being too tightly structured. These factors, they argued, deterred participants from being able to modify the techniques or goals to suit their purposes in the classroom. In the Boschee and Hein study, participants stated that an attempt was made to cover too much material over a short period of time, and that there was an insufficiency of examples to demonstrate enquiry techniques.

An all-embracing survey (cited by Altmann et al., 1979) was conducted by all Departments of Education in Canada and the United States in 1978. The researchers identified certain critical issues. Respondents stated that in-service education should be based on locally determined goals; that a process of determining needed topics in in-service education should be organized; and that in-service education should include evaluation procedures.

The major studies reviewed are listed in Figure 2.1 along with a brief summary of the findings pertaining to teachers' perceptions of what actually occured in these programs, and their preferences concerning what ought to be.

The general thrust of the studies reviewed, as is exhibited in Figure 2.1, is that teachers display preference for in-service programs which focus on improving participants' methodological (7 studies) and curricular skills (7 studies). Figure 2.1 has also revealed that teachers show preference for in-service programs which stress development of interpersonal skills (3 studies), managerial skills (3 studies), and which are based on needs (3 studies). Preferences were displayed for more time to be allotted to in-service programs (2 studies) and for in-service programs to be based on evaluative techniques (2 studies). Other preferences that were established pointed to the fact that teachers wanted instructional activities in in-service programs to be in the form of small group

Altmann, Herman and Klapp (1979)	Boschee and Hein (1980)	Cane (1969)	EPSB (1978)	Larson (1962)	Osborne and Bowling (1977)	Schreiber (1975)	Stewart (1966)	Westbury (1975)	Yarger and Brannigan (1979)	Zigarmi Betz and Jensen (1977)
PERCEPTIONS										
	-insufficiency of examples to demonstrate enquiring techniques -too much material covered over short period of time	-courses limited in type and methodology -participants have not shared their expertise in planning		-opportunities for accomplishing in-service objectives lacking -institutes and workshops promoted professional competence	-poorly planned courses -courses sparse in content -courses too theoretical -courses irrelevant in topic -theme of courses repetitious -instructors unfamiliar with teachers' problems -teachers are not permitted to participate in planning	-too much emphasis on theory	-opportunities to accomplish in-service objectives are desirable	-sessions related to needs, activities and objectives are more rewarding than ones dealing with evaluation and accountability		
PREFERENCES										
-focus on methodological, managerial and curricular skills	-focus on conceptual objectives -devote more time to presentation of material -deal with more practical examples	-deal with new methods, new aids, new materials, and new developments	-focus on teaching strategies, evaluative and managerial skills -deal with selection of new aids, curriculum planning and new methods	-base in-service on needs -allot more time to courses -in-service to involve group effort	-program to be organized by local administrator -invite the university to participate in in-service programs	-small group sessions are desirable -in-service must focus on keeping teachers current with regard to new methods new materials and new philosophy -relate in-service to classroom procedures	-base in-service on evaluative techniques -develop classroom competence -focus on technical and practical competence		-cover more content -stress individual needs -use workshops and seminars as instructional activities -courses to be cooperatively planned	-allow for exchange of ideas -deal with new materials, new skills, and new methods -allow for peer interaction -in-service to be university-based -in-service to revolve around participants' interest

Figure 2.1 Summary of Research Studies Based on Teachers' Perceptions and Preferences Concerning In-Service Education

sessions (1 study), seminars and workshops (2 studies) and lecture format (1 study).

Figure 2.1 has also illustrated teachers' perceptions of in-service education. The perceptions, compendiously, are: there is not enough time to cover the materials presented; in-service courses are limited in type, content, methodology, and practical examples; participants have not shared their expertise in planning in-service programs; opportunities for accomplishing in-service program objectives are lacking; there is too much emphasis on theory; in-service courses are often irrelevant in topic; the themes of courses are repetitious; and instructors are often unfamiliar with the teacher-participants' problems. The findings from the studies reviewed in this chapter were used as a guide in developing the conceptual framework for this study.

Models in In-Service Education

In view of the critical issues identified in the studies reviewed on teachers' perceptions and preferences concerning in-service teacher education, the researcher examined nine typologies of in-service models compiled by Beck (1977) (Figure 2.2), in order to develop an eclectic model for the purposes of this study. Of these models, typology nine, the Harris-Bessent (1969) model (Figure 2.3) was considered appropriate for the present study.

The Harris-Bessent Model, typology nine, dictates a cooperative approach to in-service education between the teacher and others. It makes allowance for the recognition of individual needs in determining in-service goals, objectives and means. Briefly, it dictates a collegial approach to the design of in-service programs.

TYPOLOGY ONE-AD[1] A-goals established by individual teacher D-means directed by individual teacher	TYPOLOGY FOUR-BD B-goals established by other(s) D-means directed by individual teacher	TYPOLOGY SEVEN-CD C-goals established by individual teacher and other(s) D-means directed by individual teacher
TYPOLOGY TWO-AE A-goals established by individual teacher E-means directed by other(s)	TYPOLOGY FIVE-BE B-goals established by other(s) E-means directed by other(s)	TYPOLOGY EIGHT-CE C-goals established by individual teacher and other(s) E-means directed by other(s)
TYPOLOGY THREE-AF A-goals established by individual teacher F-means directed by individual teacher and other(s)	TYPOLOGY SIX-BF B-goals established by other(s) F-means directed by individual teacher and other(s)	TYPOLOGY NINE-CF C-goals established by individual teacher and other(s) F-means directed by individual teacher and other(s)

[1] Letters reflect categories of goals and means.

Figure 2.2 Typology of In-Service Models.

(Source: Beck, 1977)

In the Harris-Bessent model, goals, objectives, ideals and array of activities are cooperatively determined by the teachers and his peers. Beck (1977), in a discussion of models for in-service education, has noted that the Harris-Bessent model is humanistic or teacher-centered. This model emphasizes a cooperative in-service venture between the individual teacher and others. It stresses a helper-helpee relationship between teachers and administrators, and between teachers and their peers. It allows for the involvement of the teacher at various stages of the in-service program. The Harris-Bessent model, Beck argues, maximizes the freedom of the teacher who becomes involved in the school organization, and committed to the goals which have been set in cooperation with others. This model, Beck continues, focuses on flexibility, which is necessary, due to the delicate balance between the teacher and the organization. The model which provides for the direction of means by the individual teacher with the assistance of others, is opposed to the other typologies which are either leader-dominated or teacher-dominated. The Harris-Bessent Model assumes a problem-solving approach, and is intended to meet both the needs of the individual and of the group.

The components of the Harris-Bessent Model as indicated in Figure 2.3 are goals, ideals, objectives, and activities. Each of these is defined below.

Ideals

Harris and Bessent (1969:31) have expressed the view that ideals, which are functionally expressed in goal statements, are social expectations for the total in-service program. In such a case, ideals represent what may be described as the official goals of the in-service program, or what the teacher wishes to be the outcome of the in-service

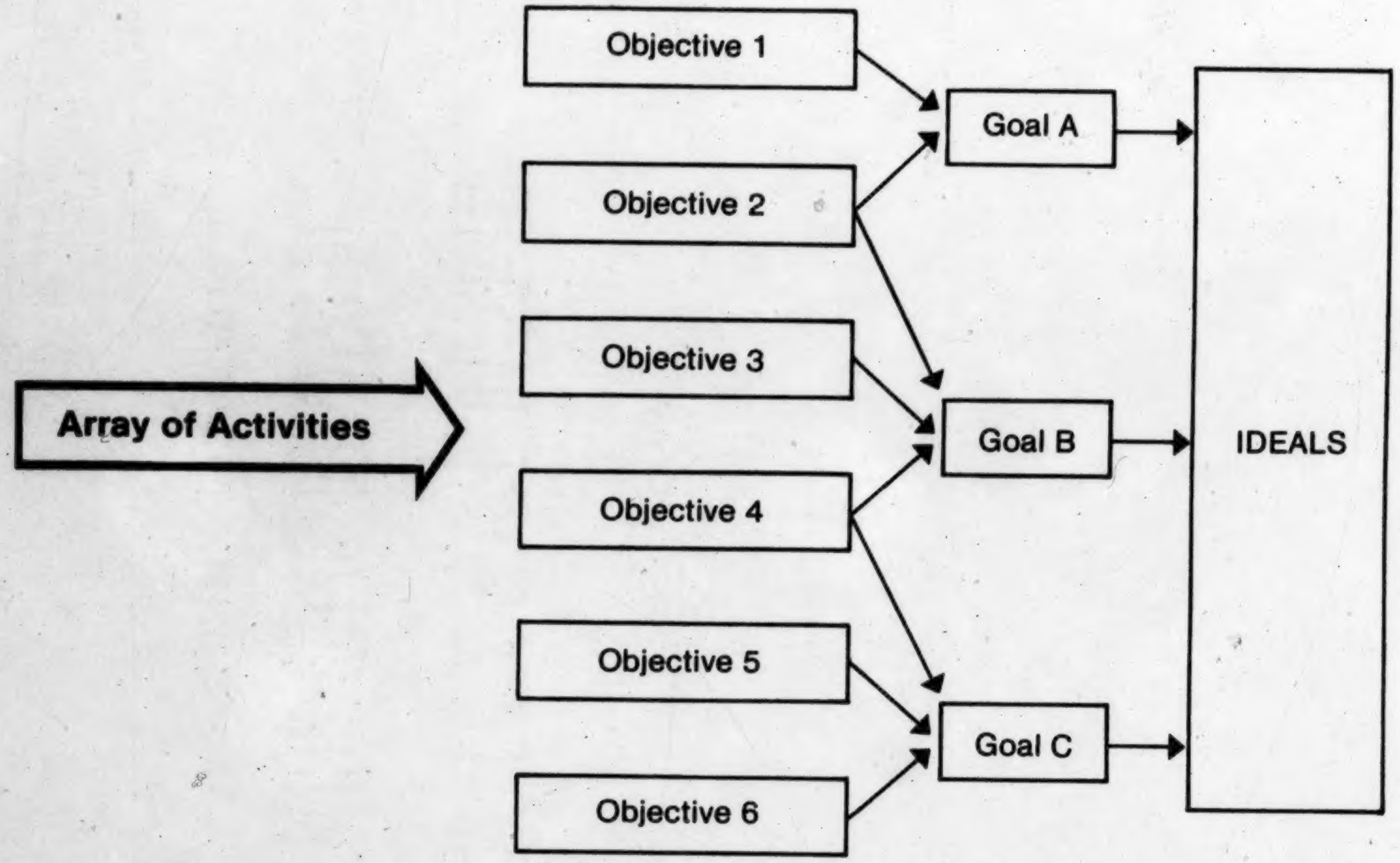
Array of Activities
Objective 1
Objective 2
Objective 3
Objective 4
Objective 5
Objective 6
Goal A
Goal B
Goal C
IDEALS

Figure 2.3 The Harris-Bessent Model (1969)
Source: Harris and Bessent (1969, p. 131)

program.

Goals

For Harris and Bessent (1969:31) goals represent the broad general outcome of an in-service program. Goals direct in-service efforts and assist in the selection of specific objectives which the program should add up to, in the long run. The goals of an in-service program from which the objectives may be selected, may therefore be viewed as operative goals, and described as the link between what is, and what should be, or what connects the real to the ideal.

Objectives

According to Harris and Bessent (1969:30) objectives represent the immediate short run outcome of an in-service program. The concept "objective" conveys the notion that the in-service program ought to have pre-determined results expressed in behavioral terms and which are related to prescribed instructional procedures. Objectives may be viewed as statements of instructional intent.

Edwards and associates (1977:40) have noted that objectives state (a) observable terminal behaviors, (b) the conditions under which these behaviors are expected to occur and (c) a minimum acceptable standard of performance. Edwards and associates maintain that objectives facilitate the teaching-learning process which includes the selection of appropriate materials and procedures. In their view, setting objectives makes the evaluation of participants' achievement more precise. Objectives, therefore, refer to the exact achievement of a teacher, subsequent to the participation of that teacher in an in-service education program.

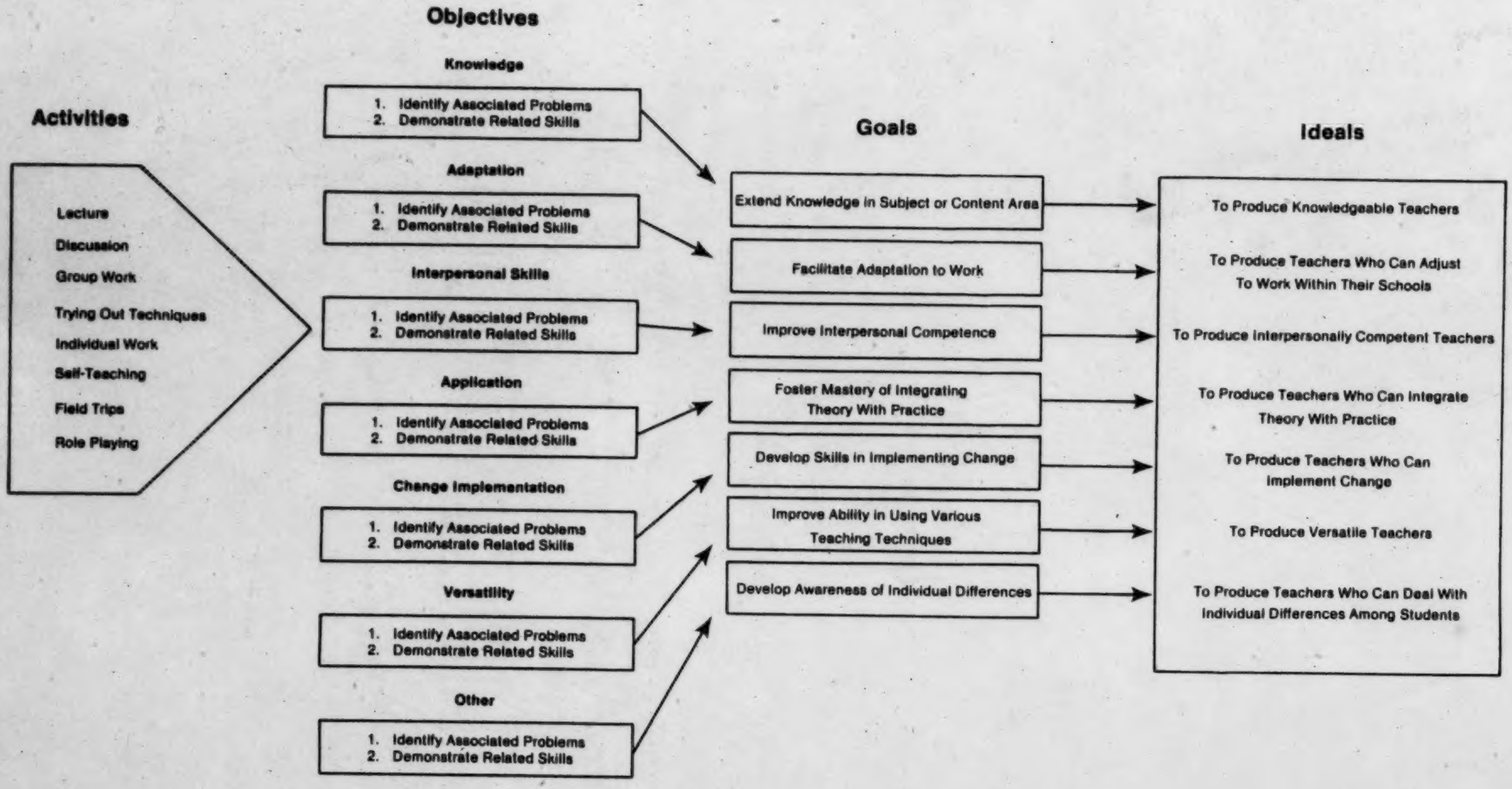
Activities
Lecture
Discussion
Group Work
Trying Out Techniques
Individual Work
Self-Teaching
Field Trips
Role Playing
Objectives
Knowledge
1. Identify Associated Problems
2. Demonstrate Related Skills
Adaptation
1. Identify Associated Problems
2. Demonstrate Related Skills
Interpersonal Skills
1. Identify Associated Problems
2. Demonstrate Related Skills
Application
1. Identify Associated Problems
2. Demonstrate Related Skills
Change Implementation
1. Identify Associated Problems
2. Demonstrate Related Skills
Versatility
1. Identify Associated Problems
2. Demonstrate Related Skills
Other
1. Identify Associated Problems
2. Demonstrate Related Skills
Goals
Extend Knowledge in Subject or Content Area
Facilitate Adaptation to Work
Improve Interpersonal Competence
Foster Mastery of Integrating Theory With Practice
Develop Skills in Implementing Change
Improve Ability in Using Various Teaching Techniques
Develop Awareness of Individual Differences
Ideals
To Produce Knowledgeable Teachers
To Produce Teachers Who Can Adjust To Work Within Their Schools
To Produce Interpersonally Competent Teachers
To Produce Teachers Who Can Integrate Theory With Practice
To Produce Teachers Who Can Implement Change
To Produce Versatile Teachers
To Produce Teachers Who Can Deal With Individual Differences Among Students

Figure 2.4 Framework for Ideals, Goals, Objectives and Activities of an In-service Education Program

Activities (Instructional)

Activities are perceived by Harris and Bessent (1969:39) as the input, means or process through which an objective or outcome of an in-service program is realized. They may be designed to meet several objectives ranging from knowledge outcomes to values and adjustments in practice.

Discussion

The Harris-Bessent (1969) model allows for individualization jointly with a cooperative venture to in-service education. The interrelationship among its parts indicates that objectives are optimized through congruence of ideals, goals, and functional activities. This model enables the teacher or administrator to identify, with facility, whether objectives are met, goals are optimized or activities lend themselves to meeting the objectives of the in-service program. The objectives and goal components of this model enable the participant-teacher, administrator, school system or university course coordinator to recognize what objectives or goals need to be stressed or vice versa. In view of the flexibility of the Harris-Bessent (1969) model it was adapted and utilized as the conceptual framework for this study.

THE ECLECTIC MODEL

Figure 2.4 illustrates the analytical framework for this study. As an adaptation of the Harris-Bessent model, it expresses a relationship among ideals, goals, objectives, and instructional activities. In view of this, it dictates a multidimensional approach to the study.

Activities in this model represent the delivery format -- the

Goal 1

(CURRICULAR)
KNOWLEDGE OF CONTENT

Objective 1

Successful participants in an in-service education program will be able to identify problems associated with the acquisition of knowledge in content areas.

Objective 2

Successful participants in an in-service education program will demonstrate the knowledge in subject or content areas in their classroom.

Goal 2

ADAPTATION (ADJUSTMENT)

Objective 2

Successful participants in an in-service education program will be able to identify difficulties associated with adaptation to work in their school systems.

Objective 2

Successful participants in an in-service program will be able to demonstrate signs of adaptation to work within their school systems.

Goal 3

INTERPERSONAL RELATIONSHIPS

Objective 1

Successful participants in an in-service education program will be able to identify problems associated with the development of interpersonal skills.

Objective 2

Successful participants in an in-service education program will be able to demonstrate interpersonal skills in their relationship within their schools.

Goal 4

(METHODOLOGICAL)
THEORY-PRACTICE INTEGRATION

Objective 1

Successful participants in an in-service education program will be able to identify problems associated with the integration of theory with practice in the classroom.

Objective 2

Successful participants in an in-service education program will be able to demonstrate ability in integrating theory with practice within their classrooms.

Goal 5

CHANGE

Objective 1

Successful participants in an in-service education program will be able to identify the need for change in program design within their schools.

Objective 2

Successful participants in an in-service education program will be able to demonstrate the ability to implement change within their schools.

Goal 6

(INNOVATIVENESS)
(METHODOLOGICAL)
TEACHING STRATEGIES

Objective 1

Successful participants in an in-service education program will be able to identify problems associated with utilizing a variety of teaching techniques within their classrooms.

Objective 2

Successful participants in an in-service education program will be able to demonstrate the ability to utilize various teaching techniques within their classrooms.

Goal 7

(OTHER)
DEALING WITH INDIVIDUAL
DIFFERENCE

Objective 1

Successful participants in an in-service education program will be able to identify problems associated with identifying individual differences among students within their classrooms.

Objective 2

Successful participants in an in-service education program will be able to demonstrate the ability to identify individual differences among their students within their classrooms.

Figure 2.5: Goals and Objectives of In-service Education

input, means, or process of an in-service education program. Objectives represent the product or output, and are derived from goals which functionally express the ideals. Each objective is expressed in behavioral terms, and for the purposes of this study, two objectives are linked to each of the seven goals as is illustrated in Figure 2.5. Each goal is related to the development of specific skills -- curricular, interpersonal, methodological (Ratsoy et al., 1979), innovativeness and change implementation (Zigarmi et al., 1977), adaptation, and dealing with individual student differences. The instruments for this study were partly developed from the eclectic model which forms the conceptual framework.

In this study a school district-sponsored in-service activity or an off-campus university course is viewed effective to the extent to which teachers perceive that course or activity to assist them to meet the objectives outlined in the eclectic model. Furthermore, teachers' perceptions of certain aspects of the in-service program must be congruent with their preferences.

SUMMARY OF CHAPTER 2

The purpose of this chapter was to review research studies which pertain to teachers' perceptions and preferences concerning in-service education with a view to emphasizing weaknesses and strengths of such programs. From the studies reviewed, key concepts were identified, and these were combined with an adapted version of the Harris-Bessent (1969) model to formulate the conceptual framework for the study. The conceptual framework was used as a guide to designing and developing the instruments utilized in assessing the effectiveness of off-campus university courses and school district-sponsored in-service activities, and experienced teachers' perceptions and preferences concerning certain aspects of the two contexts of in-service teacher education.

The literature reviewed embraced teachers' perceptions and preferences concerning in-service education in general. Specific studies relating to university courses, and studies which pertain to school district-sponsored in-service activities were also reviewed. Following the review, was a discussion of the Harris-Bessent model and its appropriateness for the study. There was also a discussion of the main components of the conceptual framework.

CHAPTER 3

METHODOLOGY AND RESEARCH DESIGN

This chapter outlines the general methodology of the study which includes sampling and data collection procedures. In addition, the characteristics of respondents, and the results of the pilot testing of the instruments are presented.

Methodology

The major purpose of this study was to determine the effectiveness of off-campus university courses and school district-sponsored in-service activities in terms of the expectations which experienced teachers hold for them. A second purpose was to identify the perceptions and preferences of experienced teachers with regard to the ideals, goals, and instructional practice pertaining to these contexts of in-service education. In view of the nature of this study, a descriptive and exploratory approach was considered appropriate.

Best (1959:102-104) has noted that the descriptive method of research is concerned with relationships that exist; practices and beliefs that prevail; points of view and attitudes that are held, and trends that are developing. From this type of research, Best continues, it is possible for conclusions to be based on comparisons, contrasts or relationships. Best also adds that descriptive research is based on present conditions such as what is wanted, in what direction we want to go, and how to get there. In concluding, Best remarked that descriptive research involves more than fast-gathering and tabulations. It deals with analysis and interpretation of data for the understanding and solution of specific problems.

This study involved two survey procedures: mailout questionnaire and interviews. According to Wiseman and associates (1967:32) survey entails gathering and interpreting facts about a social situation. It poses specific questions, and a researcher who utilizes the survey method need not use hypotheses. Van Dalen (1973:256) has, however, argued that descriptive research builds a foundation of facts upon which exploratory hypotheses may be constructed.

The methods of survey adopted for this descriptive and exploratory study have been endorsed by Wayland (1956), Best (1959), Wiseman and associates (1970) and Tuckman (1978). Tuckman regards interviews and questionnaires as means of obtaining information concerning past and present occurrences. In his view, they provide access to what is in a person's head. He affirms that these approaches make it possible for the researcher to measure what a person thinks (attitudes and beliefs), or what a person likes or dislikes (values and preferences).

Interviews

There are distinct advantages to be derived from the use of interviews. Wayland (1956:30) believes that they permit respondents to state their problems, interests, and their sources of origin clearly. According to Tuckman (1978:212), they are more accurate than questionnaires, they provide for unstructured response and the rate of return is good. It has also been argued that people tend to talk more freely than write, hence more information can be generated from interviews (Tuckman, 1978:211; Best, 1959:167).

Interviews are flexible. They allow the researcher to observe communication breakdown with the respondent should such occur, and they make allowance for in-depth pursuit of items in the questionnaire for which pre-coding of answers seemed difficult (Wiseman et al., 1970:105-107). In the view of Best (1959:167), interviews allow for secure, friendly relationships between the subject and researcher, and facilitate the researcher's access to confidential information which the subject might have been reluctant to record on a questionnaire. Wiersma (1975:138) has concurred with this line of reasoning and has noted that the interview is well suited for probing the feeling and perceptions of subjects.

The Questionnaire

In the opinion of Van Dalen (1973:324), questionnaires are widely used by educators to obtain facts about past, present, and anticipated events, conditions and practices, and to make enquiries concerning attitudes and opinions. They may also reach people in widely scattered areas at a realtively low cost (p. 325) and the questions are easier to score.

It is the view of Wiersma (1975:144) that certain disadvantages are associated with the use of questionnaires. Wiersma, citing non-response as a problem, has observed that they could lead to a low rate of return and thus produce distortion of the real situation due to data gap.

This study which sought to establish the perceptions and preferences of experienced teachers concerning the goals, ideals, objectives, and instructional practices of off-campus university courses and school district-sponsored in-service activities meets the conditions of a descriptive research as specified by Wiseman and Best. It is also exploratory because it attempts to gain new insights.

The present study is concerned with points of view (perceptions), and values (preferences) held by experienced teachers with regard to certain aspects of off-campus university courses and school district-sponsored in-service activities as two contexts of in-service education in which experienced teachers participate. It is concerned with the relationships that exist between experienced teachers, perceptions and preferences with regard to the instructional practices which include effectiveness of instructional activities in meeting set objectives, time allotted to instructional activities, and the participation of experienced teachers in organizing in-service programs. Other relationships with which this study is concerned are those which exist among goals, ideals, and met objectives that are connected with the two contexts of in-service education studied. Conclusions that are drawn are in consequence, based on contrasts, comparisons, and relationships.

With a view to establishing the relationships, contrasts or comparisons as well as determining the optimization of program objectives, and participants' input, the researcher has adopted a multidimensional approach to the study. The multidimensional approach includes the goal approach, the system resource approach and the functional approach. While the goal approach allows for comparison between organizational performance and pre-stated official objectives. The functional approach bases the functions of the organizations on the theoretical frame of reference of the evaluator. The systems resource approach, on the other hand, looks at the organization in terms of its capacity to secure an advantageous bargaining position in its environment; to acquire scarce and valued resources, and use them in such a way as to enhance its effectiveness. The multidimensional approach is descriptive and deals with relationships. It accommodates a micro as well as a macro perspective of the in-service program. The multidimensional approach is also consistent with the eclectic model which has been used as the analytical framework in this investigation.

Sampling Procedures

The population involved in this study of teachers' perceptions and preferences concerning off-campus university courses and school district-sponsored in-service activities included experienced teachers in Alberta who were in active service in the school year 1979-1980, provided that they met the following criteria: (1) had recently participated in school district-sponsored in-service activities, (2) had participated in off-campus university courses offered by the University of Alberta, (3) originated from one of 5 randomly selected off-campus centres, and (4) fell within the age range of 20 to 65 years.

With the assistance of three course instructors, two teachers and a principal, a mailing list of 145 names of teachers was compiled. From this list, 120 subjects were randomly selected in terms of sub-samples which were dictated by dichotomous grouping of centres according to geographical location and rural-urban characteristics. The researcher resorted to the use of sub-samples in order to ensure that subjects were not clustered in a single geographical location. Furthermore, random sampling procedures make it possible for a researcher to make probability statements. Each of the sub-samples was referred to in terms of numerical descriptions: "Centre One," "Centre Two," "Centre Three," "Centre Four" and "Centre Five." This was done in order to conceal the identity of respondents who were assured that anonymity would be mtaintained. For the purposes of this study each sub-sample consisted of 24 subjects. The characteristics of the subjects are illustrated in Tables 3.3 through 3.8.

Characteristics of Respondents

Age distribution. The majority of respondents -- 22 males and 70 females -- (N=92) fell within the age range of 26 to 55 years. The data revealed that approximately 3 percent of the respondents were in the 20 to 25 years age group. About 36 percent were in the 26 to 35 years age group. Approximately 40 percent were in the 36 to 45 years age group. About 16 percent were in the 46 to 55 years age group and approximately 4 percent were over 55 years of age. In order to facilitate data analysis the age groups were collapsed into three ranges: 20 to 35 years, 36 to 45 years, and 46 to 65 years. The data are illustrated in Table 3.1.

Completed years of teacher education. As is exhibited in Table 3.2, approximately 51 percent of the respondents had less than 4 years of teacher education. About 36 percent had 4 years of teacher education. There were 10 percent with 5 years of teacher education and approximately 4 percent with 6 years. In order to facilitate data analysis, the groups were collapsed into three, namely, 1 to 2 years, three years, and 4 years or more.

Degrees held. When respondents were grouped on the basis of highest degree held (Table 3.3), the data revealed that approximately 45 percent had less than a bachelor's degree while approximately 53 percent held one or more bachelor's degrees. Of those who held bachelor's

Table 3.1

Percentage and Frequency Distribution of Respondents When Grouped on the Basis of Age (N = 92)

Age	Frequency	Percentage
20-25	3	3.3
26-35	33	35.9
36-45	36	39.1
46-55	15	16.3
56-65	4	4.3
Missing Case	1	1.1
Total	92	100.0

Table 3.2

Percentage and Frequency Distribution of Respondents When Grouped on the Basis of Completed Years of Teacher Education (N = 92)

Completed Years of Teacher Education	Frequency	Percentage
One Year	9	9.8
Two Years	16	17.4
Three Years	22	23.9
Four Years	33	35.9
Five Years	9	9.8
Six Years	3	3.3
Total	92	100.0

or more, about 4 percent held a graduate diploma, and 3 percent held a master's degree.

Table 3.3

Percentage and Frequency Distribution of Respondents
When Grouped on the Basis of Highest
Degree Held
(N = 92)

Degree	Frequency	Percentage
Less than Bachelor's	41	44.6
Bachelor's	42	45.7
Graduate Diploma	4	4.3
Master's	3	3.3
Missing Data	2	2.2
Total	92	100.0

Years of teaching experience. Table 3.4 reveals that 22 percent of the respondents had 1 to 5 years of experience. Approximately 28 percent had 6 to 10 years. About 19 percent had 11 to 15 years. Approximately 20 percent had 16 to 20 years and approximately 11 percent had over 20 years. For data analysis, these 5 groups were collapsed into 3. The three groups were, 1 to 5 years, 6 to 15 years and 16 years or more. It was felt that collapsing the groups would facilitate the analysis of the data.

Grade levels taught. In terms of grade levels taught most often (Table 3.5) about 7 percent of the respondents reported being kindergarten teachers. Elementary teachers represented 53 percent of the respondents.

Table 3.4

Percentage and Frequency Distrbution of Respondents
When Grouped on the Basis of Experience
(N = 92)

Years of Teaching Experience	Frequency	Percentage
1-5 Years	21	22.8
6-10 Years	26	28.3
11-15 Years	17	18.5
16-20 Years	18	19.6
Over 20 Years	10	10.9
Total	92	100.0

Table 3.5

Percentage and Frequency Distribution of Respondents
When Grouped on the Basis of Grade Levels
Taught Most Often
(N = 92)

Grade Levels Taught Most Often	Frequency	Percentage
Kindergarten	6	6.5
Elementary	49	53.3
Junior High	13	14.1
Senior High	13	14.1
Resource	2	2.2
Substitute	3	3.3
Administration and Guidance	6	6.5
Total	92	100.0

Secondary school teachers represented 28 percent of the respondents. Of the remaining 12 percent of the respondents, 2 percent were resource room teachers, 3 percent were substitute teachers and approximately 7 percent were administrators.

Major area of teaching concentration. As is exhibited in Table 3.6 the distribution of respondents in terms of area of teaching concentration was: administrators, 6 percent; business education teachers, 2 percent; school counselors, 2 percent; elementary education specialist, 25 percent; school counselors, 2 percent; elementary education specialist, 4 percent; industrial arts teacher, 1 percent; language arts teachers, 22 percent; mathematics-science teachers, 13 percent, social studies teachers, 10 percent; and special education teachers, 4 percent.

Off-campus university courses. Table 3.7 exhibits information on the number of off-campus university courses taken and the years in which respondents took these courses. According to the data, approximately 20 percent of the respondents had taken one course; 16 percent had taken 2 courses; 15 percent had taken 3 courses; 13 percent had taken 4 courses, and approximately 33 percent had taken more than 4 courses. The data also revealed that approximately 10 percent of the respondents had taken off-campus university courses prior to 1976. About 8 percent of the respondents had taken off-campus courses in the academic year 1976-1977. About 9 percent had taken such courses in the academic year 1977-1978. Approximately 45 percent had taken off-campus university courses in the academic year 1978-1979, and about 27 percent were involved in taking such courses in the academic year 1979-1980.

School district-sponsored in-service activities. According to the data which are exhibited in Table 3.8, 32 percent of the respondents

Table 3.6

Distribution of Respondents According to Major Area of Teaching Concentration (N = 92)

Area of Teaching Concentration	Number of Respondents	Percentage
Administration	6	6.52
Business Education	2	2.0
Counseling	2	2.0
Elementary Education	23	25.00
Food Science	1	1.00
French	4	4.00
Industrial Arts	1	1.00
Language Arts	20	22.00
Math-Science	12	13.00
Social Studies	11	12.00
Special Education	4	4.00
Missing Cases	6	6.52

had recently participated in language arts in-service activities. Of the remaining respondents, 24 percent had recently participated in social studies in-service activities, 14 percent were recently involved in workshops held for special education teachers, 28 percent did not specify the nature of the workshop or institute in which they had recently participated and 2 percent indicated that they had not recently participated in any in-service activities. The data in Table 3.8 reveal that language arts and social studies respondents had

Table 3.7

Percentage and Frequency Distribution of Years and Number of Off-Campus University Courses Taken by Respondents (N = 92)

Off-Campus University Courses	Frequency %	Years in which Courses were Taken	Frequency %
One	19.6	Before 1976	9.8
Two	16.3	1976-1977	7.6
Three	15.2	1977-1978	8.7
Four	13.0	1978-1979	44.6
More than Four	32.7	1979-1980	27.2
Missing Cases	3.3	Missing Cases	2.2
Total	100.0		100.0

Table 3.8

Distribution of Respondents on the Basis of Average Hours Devoted to the Most Recent School District-Sponsored In-Service Activity

Type of Activity	Number of Respondents	Percentage	Average Hours
Language Arts	29	32.0	6
Social Studies	22	24.0	6
Special Education	13	14.0	7
Not Specified	26	28.0	5
Missing Cases	2	2.0	-

participated in at least 6 hours of in-service activities recently. Special education teachers were provided with 7 hours of in-service sponsored by their school districts and respondents who indicated their in-service activity as institute or workshop were provided with an average of 5 hours of in-service.

Data Collection Procedures

Collection of data was subject to many constraints. These included limited time, difficulty in obtaining the study sample, conflict between the data collection period and such school events as the beginning of a new semester, teachers' convention and Christmas break. These constraints could have limited the generalizability of the findings.

Data collection proceeded in various stages. First, the Dean of the Faculty of Education, the Special Sessions Coordinator, and course instructors from the five centres were contacted either personally or by telephone in the early Fall of 1979 and asked for permission to conduct the study. Next, formal letters were sent to the Special Sessions Coordinator and course instructors to confirm the prior discussion. Appendix C displays the letters and a letter of response. A letter was later sent to the Dean of the Faculty of Education to notify him that the study was in progress (Appendix C).

Prior to the distribution of the questionnaires for the main study, in the early Winter of 1980, the researcher with the assistance of a principal, three course instructors, and two teachers, compiled a mailing list of 145 teachers who fulfilled the requirements for the study. Appendix E displays the letter of request and the letter thanking the persons who assisted in compiling the list. It must be stated here that the cooperation of the principal, the teachers and the course instructors was overwhelming.

On the receipt of the mailing list for each sub-sample, the researcher randomly selected the subjects to whom a package consisting of a stamped, number-coded, self-addressed envelope for the return of the completed questionnaire, a questionnaire (Appendix A) and a cover letter explaining the nature of the study (Appendix D). Due to the fact that the researcher had not received the mailing lists simultaneously, packages to respondents were mailed in staggered fashion.

Two weeks following the initial mailing of the questionnaires, a follow-up letter (Appendix D) was mailed to 50 subjects who had not returned their questionnaires. After a further wait of two weeks, the researcher mailed a second follow-up letter (Appendix D) with a copy of the questionnaire to subjects who had still not returned their questionnaires. Of the 99 returned questionnaires 92 were usable; 2 were received too late for processing; 2 were returned by the Post Office as the respondents had moved; and 3 were from respondents who did not qualify as subjects for this study because they were not currently teaching. Table 3.9 exhibits these data in summary form.

Ten subjects were selected for interviews. Good (1972), in his discussion of the size of a group to be interviewed, has noted that a group of 10 to 12 persons is neither too large nor unwieldy. As the researcher wished to interview a manageable number of respondents, Good's notion was translated to this context for individual interviews. The criteria for selecting interviewees were (a) geographical location, (b) interesting comments made on the returned questionnaire, and (c) non-return of the questionnaire. Two subjects were selected from each centre. Each subject was first contacted by telephone and asked to participate in the interview. All agreed. Next, a letter confirming the telephone discussion (Appendix D) along with a Permission Form (Appendix F) was sent to each prospective interviewee. On the return of the Permission Form, the interview was conducted by the researcher. All interviews were conducted in March, 1980.

Table 3.9

Summary of Questionnaire Distribution and Returns

Sub-sample	Distributed	Returned	Non-Returns	Total Usable Returns	Total Non-Usable Returns
Centre 1	24	19	5		
Centre 2	24	23	1		
Centre 3	24	18	6		
Centre 4	24	19	5		
Centre 5	24	20	4		
Total	120	99	21	92	7

The Instruments

The questionnaire. The main instrument for collecting the data for the study was adapted from a revised version of a Guide to Learning (GIL) student questionnaire which was developed by the International Learning Cooperative, Oslo (1979). The Canadian revision of this questionnaire was undertaken by educators from Ontario Institute of Studies in Education (OISE) and Simon Fraser University, British Columbia. In order to adapt and use this questionnaire for the purposes of this study, the researcher sought and obtained written permission. Both the letter seeking information and the letter of response are exhibited in Appendix B.

The questionnaire which was used for this study consisted of 80 items and was designed in two parts: Part I consisted of 11 items which dealt with demographic information, and Part II consisted of 69 substantive items which dealt with ideals, goals, met objectives, and instructional practices relating to off-campus university courses and school district-sponsored in-service activities. This instrument also sought information which could be used to determine the effectiveness of off-campus university courses and school district-sponsored in-service activities. In some instances, respondents were asked to state their perceptions concerning the extent to which various features of in-service education were evident in the real, or present, occurrences in off-campus university courses and school district-sponsored in-service activities, and their preferences or ideals concerning various aspects of in-service education as they related to off-campus university courses and school district-sponsored in-service activities.

Most of the items in this questionnaire were rated on a five-point Likert-type scale, and were machine-scored. It has been argued that rating is easy to score, and that it permits respondents to choose between alternatives in conjunction with being critical of their estimation of the value of the activity (Tuckman, 1978:208-212). Furthermore, rating lends itself to both parametric and non-parametric statistical treatments, and thus facilitates statistical testing of the data.

While some items required a single or prioritized response, others required two prioritized responses. The structure of a questionnaire of this description could avert problems of respondents having to answer questions related only to what is (the real) (Tuckman, 1978:179), because it also makes allowances based on responses based on "what ought to be" (the ideal).

In this study, respondents were asked to use the five-point rating scale to indicate their degree of perceptions or preferences concerning off-campus university courses offered by the University of Alberta, and of school district-sponsored in-service activities. The various possible responses were given numerical values which were summed over all items, to give the subjects' attitude scores. In this case, a high score would indicate that the subject regarded that perception or preference as "very great" and a low score would indicate a low rating -- little or none -- attributed to the perception or preference. The Likert-type rating scale which consisted of six response categories is illustrated in Figure 3.1.

1. None or little, not effective
2. Some, somewhat effective
3. Moderate, moderately effective
4. Great, quite a bit, quite effective
5. Very great, a great deal, very effective

0. Cannot answer

Figure 3.1: Numerical Values and Response Categories on the Rating Scale

In his discussion of the Likert-type rating scale, Wiersma (1968: 207), asserts that it consists of a number of points on the theoretical continuum to which the subject may respond, and thus indicate his intensity of feeling. The rating scale facilitates statistical treatment of the data.

The questionnaire was constructed to collect ordinal, nominal, and interval data, and to permit free choice and unstructured responses, as well as fixed or forced choice responses. In consequence, the subject was, at times, permitted to give his own responses rather than merely select those of the researcher's. Thus, this averted any monotony which might have arisen from only forced-choice questions, where the respondent was asked to indicate only his perceptions or preferences. An instrument which provides for free-and forced-choice questions is believed to establish rapport between the subject and the researcher, as subjects find free-choice questions more agreeable to answer.

This questionnaire was designed to collect data which could prove relevant to educators who are involved in research and to subjects who wish to learn about their interests. Finally, the instrument was designed to collect information on the input, process and output of in-service programs, and was therefore regarded as appropriate for the investigation.

Pilot testing of the questionnaire. In terms of validity, the instrument underwent various stages of scrutiny by teachers and administrators prior to being used for the study. In July, 1979, the instrument was administered at an off-campus course. The five teachers who participated in this pilot study examined the instrument for clarity, appropriateness, adequacy, and relevance of the questions. As a result of this study, the instrument was revised and some questions were omitted.

A second pilot study was conducted in Edmonton in September, 1979. Five practising teachers and five graduate students who were experienced teachers or administrators participated in this study. Again, the instrument was revised as a result of this study, and some questions were replaced with new ones.

In December, 1979, a third pilot study was conducted and ten randomly selected subjects involved were asked to suggest possible amendments to the questionnaire and to time themselves when answering the questions. The cover letter appears in Appendix D. The researcher also went through the items, personally, with five of these subjects who claimed that the questions were clear, appropriate, and to the point. The average time taken by these subjects to complete the questionnaire was 20 minutes. As a result of the third pilot study, the questionnaire was regarded as appropriate for use in the main study and was, consequently, mailed to the respondents in January, 1980.

The interview. The purpose of the interview was to facilitate the acquisition of information concerning the weaknesses and strengths of the most recent in-service programs in which respondents had participated. Both broad and specific questions were included in the interview so that the researcher could allow respondents to provide willing and relevant information within their own frame of reference. All questions were posed in the same order during the interviews and the responses which were recorded by the interviewer were edited immediately after each interview while the situation was still clear in the interviewer's mind. The Interview Guide is displayed in Appendix A. As indicated earlier in this chapter, the ten interviewees were selected on the basis of geographical location, interesting comments made on the questionnaire or non-return of the questionnaire.

Pilot testing of interview guide. The Interview Guide was pilot tested in September, 1979. Suggestions were made by interviewees concerning expansion of certain questions and the deletion of others. The Interview Guide was, as a consequence, revised for data gathering. Interviews for the main study were conducted in March, 1980.

Data analysis. All data from the questionnaires were coded on cards and computer analyzed. Subsequent to data analysis the researcher constructed tables on which to present the data in the form of frequency distributions and percentages. This procedure facilitated examination of the data for dominant patterns, trends, relationships and significant differences.

One-way analysis of variance and *t*-tests were used to test for significant differences. The latter was used when one pair of means was involved, and the former was used when more than two means were entailed. Following the analysis of variance test, where the F Ratio was significant at the .05 level or beyond, the Scheffé procedure was used to identify statistically different pairs. In this instance, the level of significance was set at the .10 level in view of the rigor of this test as has been indicated by Ferguson (1971).

Specific questions formulated for each of the sub-problems of the study were used as a guide for the data analysis and presentation of the findings. The data obtained from interviews and from written comments on the questionnaires were incorporated into the discussion of the findings.

SUMMARY OF CHAPTER 3

In this chapter the approach to the study was presented. The methodology, which is exploratory and descriptive, was discussed, and the use of interviews and a questionnaire as data collection methods was justified. The characteristics of respondents were presented, and sampling procedures were discussed. A description of the instruments used for collecting data for the study was made, and this was followed by a report on pilot testing of the instruments.

CHAPTER 4

EXPERIENCED TEACHERS' PERCEPTIONS OF REAL GOALS AND IDEALS OF IN-SERVICE EDUCATION

The purpose of this chapter is to relate the findings which are relevant to sub-problems 1 and 2. These sub-problems are concerned with experienced teachers' perceptions of the real goals, or what is presently occurring; and perceptions of the ideals; or what ought to occur; with regard to service programs. School district-sponsored in-service activities and off-campus university courses are the contexts of in-service education which provide the basis for this study. This chapter consists of three parts. The first is concerned with teachers' perceptions of the ideals of in-service education, and the second focuses on experienced teachers' perceptions of the goals of off-campus university courses. The third part highlights teachers' perceptions of the goals of school district-sponsored in-service activities.

A major purpose of this study was to identify experienced teachers' preferences pertaining to the ideals of in-service education and to establish their perceptions of the goals and met objectives, and their perceptions and preferences with regard to instructional practices of both school district-sponsored in-service education activities and off-campus university courses as aspects of continuing education available to teachers in the Province of Alberta, Canada. A second purpose of the study was to determine the effectiveness of off-campus university courses and school district-sponsored in-service activities as two contexts of in-service education available to experienced teachers in Alberta.

In Chapter 1, the sub-problems of the study were formulated. One part of the Teacher Questionnaire sought to identify experienced teachers' preferences concerning the ideals of in-service education. Another part of the questionnaire was directed at determining what the perceptions of experienced teachers were with regard to the importance of the goals of off-campus university courses and school district-sponsored in-service activities. In order to establish clear focus, experienced teachers' perceptions and preferences concerning the most recent off-campus university course and the most recent school district-sponsored in-service activity in which they participated were used as the frame of reference.

I. PERCEPTIONS OF THE IDEALS OF IN-SERVICE EDUCATION

Sub-problem 1: How important should the following ideals of in-service teacher education be?

In order to obtain information for this sub-problem, 7 ideals concerned with knowledge, adaptation, interpersonal competence change implementation, application, versatility, and dealing effectively with individual student differences were identified. Respondents were invited to rate each of these on a five-point Likert-type scale. Mean ratings were calculated for each of the 7 ideals and were used as a basis for the rank ordering that appears in Table 4.1.

Findings. Table 4.1 summarizes the data concerning respondents' perceptions of the importance of the 7 ideals. As is exhibited in the table, the highest mean rating (4.38) was assigned the ideal, which is, to produce teachers who can deal with individual differences among students. Versatility, that is, to produce teachers who can be versatile in using a variety of teaching techniques,

Table 4.1

Respondents' Ratings[1] of the Ideals of In-Service Education
(N = 92)

Category	Ratings of Ideals		Rank
	Mean	Standard Deviation	
1. To produce teachers who are knowledgeable in subject or content areas.	3.73	1.03	6
2. To produce adaptable teachers for work within existing school systems.	3.83	1.02	4
3. To produce teachers who are competent in interpersonal relationships.	3.79	0.81	5
4. To produce teachers who can integrate theory with practice.	4.28	0.82	3
5. To produce teachers who have the skills to implement change in schools.	3.63	0.93	7
6. To produce teachers who can be versatile in using various teaching techniques.	4.29	0.72	2
7. To produce teachers who can deal effectively with individual differences.	4.38	0.85	1

[1] Means were computed from the five response categories; numberal 1 = none or little in importance; 2 = some; 3 = moderate; 4 = great; 5 = very great.

was given the second highest rating with a mean of 4.29; and application, that is, to produce teachers who can integrate theory with practice, was third highest with a mean rating of 4.28. Adaptation, namely, to produce adaptable teachers for work within existing school systems was assigned fourth highest rating (mean: 3.83). Interpersonal competence, which is to produce teachers who are competent in interpersonal relationships received fifth rating, with a mean of 3.79; knowledge -- to produce teachers who are knowledgeable in subject or content areas -- was allotted sixth rating with a mean of 3.73; and change implementation -- to produce teachers who have the skills to implement change in schools -- was assigned seventh rating with a mean of 3.63. Whereas the three highest ranked ideals received average ratings falling almost midway between "great" and "very great" on the scale, the remaining 4 ideals received average ratings falling between "moderate" and "great".

Discussion. The importance attached to the 7 ideals of in-service teacher education may be interpreted as a reflection of experienced teachers' preferences concerning what ought to be the focus of in-service education planned for them. Though the variables may be ranked in descending order of perceived importance, two clusters are apparent.

The variables -- to produce teachers who can deal with individual differences among their students, to produce teachers who can use a variety of teaching techniques, and to produce teachers who can integrate theory with practice within their classrooms, fell between "great" and "very great", in one cluster.

The second cluster included the ideals; to produce adaptable teachers for existing school systems; to produce teachers who are competent in interpersonal relationships; to produce teachers who have the skills to implement change in schools; and to produce teachers who are knowledgeable in subject or content area. Variables in this second cluster received average ratings which fell between "moderate" and "great" but well above the midpoint between these two ratings on the scale. From the data it is safe to assume that experienced teachers place strong emphasis on the 7 ideals of in-service education.

Results from Further Analyses

In view of the ranking and mean ratings of the variables concerned with the ideals of in-service education, further analyses of the data were undertaken to determine whether respondents differed in their preferences when grouped on the basis of social categories. Respondents were grouped on the bases of sex; age (20-35 years, 36-45 years and 46-65 years); experience (1-5 years, 6-15 years, and 16 years and over); completed years of teacher education (1-2 years, 3 years, and 4 years or more); grade levels taught most of (elementary and secondary); major area of teaching concentration (social studies, language arts, math-science and unspecified); number of off-campus university courses taken (1 or 2, 3 or 4, 5 or more); type of off-campus courses taken (educational administration, educational foundations, educational curriculum and instruction, educational psychology and arts); and type of most recent school district-sponsored in-service activity (language arts, social studies, special education, and unspecified). These groupings facilitated the analysis of the data. Where more than one pair of means were involved, one-way analysis of variance was employed, and *t*-tests were used when only one pair of means was involved.

Findings. The major findings of these additional analyses were that respondents grouped on the bases of sex, most recent school district-sponsored activity, major area of teaching concentration, type of most recent off-campus university course, grade levels taught most often, and completed years of teacher education, did not differ significantly in their perceptions of the seven ideals. The significant differences

Table 4.2

Relationship Between Teacher Characteristics and Preference for Ideals of In-service Education (N = 92)

Independent Variable	Item Number for which there was a Significant Difference	Group	N	Rating of Ideals Mean	Standard Deviation
Age	2	20-35	36	3.58┐	1.02
		36-45	34	4.21┘	0.80
		46-65	19	3.63	1.21
	3	20-35	36	3.86┐	0.80
		36-45	32	3.97┐	0.60
		46-65	18	3.30┘	1.02
Number of Off-Campus Courses Taken	4	1-2	32	4.31┐	0.65
		3-4	25	4.56┐	0.71
		5+	37	3.96┘	1.18
Experience	1	1-5 yrs	17	4.35┐	0.70
		6-15 yrs	43	3.60┘	1.00
		16+ yrs	28	3.64	1.13
Completed Years of Teacher Education	No significant differences among the three groups				
Grade Levels Taught Most Often	No significant differences among the three groups				
Type of Off-Campus Course Taken	No significant differences among the five groups				
Major Area of Teaching Concentration	No significant differences among the four groups				
Most Recent School District In-Service	No significant differences among the four groups				
Sex	No significant differences among the two groups				

[1] Square Bracket (]) denotes significantly different pairs of means.

observed were within the groups that were based on age, experience, and number of off-campus university courses taken. When respondents were grouped on the basis of age, two groups differed significantly on Ideals Number 2 and 3. Within the experience grouping, respondents significantly differed on Ideal Number 1. Respondents also significantly differed on Ideal Number 4, when grouped on the basis of number of off-campus university courses taken.

Comparison based on age of respondents. Table 4.2 indicates that the age group, 20 to 35 years (mean: 3.58), significantly differed from those within the 36 to 45 years age group (mean: 4.21) with regard to the importance of Ideal Number 2 — to produce adaptable teachers for work within existing school systems. The mean rating for the 20 to 35 year olds fell between "moderate" and "great", whereas that of the 36 to 45 year olds was between "great" and "very great".

With regard to Ideal Number 3 — to produce teachers who are competent in interpersonal relationships, the age groups 20 to 35 (mean: 3.86) and 36 to 45 (mean: 3.97) differed significantly from the age group 46 to 55 (mean: 3.30). Though the three mean ratings fell between "moderate" and "great" on the five-point rating scale, the 20 to 35 year olds, and the 36 to 45 year olds displayed stronger preference.

Comparison based on number of off-campus university courses. The data indicated that of the three respondent groups, those who had taken 1 or 2 off-campus university courses and those who had taken 3 or 4 off-campus university courses differed significantly from those who had taken 5 or more off-campus university courses on the ideal concerned with producing teachers who can integrate theory with practice. The mean ratings for respondents who had taken 1 or 2 off-campus university courses (4.31) and for those who had taken 3 or 4 off-campus university courses (4.56) fell between "great" and "very great". For the group which had taken 5 off-campus university courses, the mean rating was (3.96), and fell between the "moderate" and "great" response categories. Table 4.2 summarizes the data.

Comparison based on experience of respondents. Of the three experience groups, respondents with 1 to 5 years of teaching experience (mean: 4.35) significantly differed from respondents with 6 to 15 years of experience (mean: 3.60) on the variable concerned with producing teachers who are knowledgeable in subject or content areas. The data summarized in Table 4.2 demonstrate that while the rating of the 1 to 5 years experience group fell between "great" and "very great", that of the 6 to 15 years experience group fell slightly above the midpoint between the response categories, "moderate" and "great".

Discussion of results of further analyses. As may be inferred from the data presented as a result of the further analyses, respondents grouped on the bases of sex, grade level~~s~~ taught most often, level of education, major area of teaching concentration, type of off-campus university courses taken recently, and the most recent school district-sponsored in-service activity did not disagree on the ideals of in-service education (Table 4.1). In fact there was a high degree of consensus among these groups in relation to these ideals. Differences which were observed (Table 4.2) among respondent groups were few in number, and although statistically significant, none was in excess of .8 on the five-point rating scale. Furthermore, in the comparison of means, following significant F Ratio and t-tests, of a possible 252 pairs of means compared, only 6 pairs differed significantly. Thus 246 of 252 pairs of means were not significantly different. Overall, therefore, the findings associated with these additional analyses support a conclusion that there was a high degree of agreement among the various groups on the seven ideals.

II. PERCEPTIONS OF THE REAL GOALS OF IN-SERVICE EDUCATION

Determining the importance of the real goals of in-service education in terms of what respondents perceived as occurring was the task of sub-problem 2. Respondents were asked to use a five-point rating scale, their perceptions concerning the seven goal variables, namely, knowledge, adaptation, interpersonal competence, application, change implementation, versatility, and dealing effectively with individual student differences. The frame of reference was to be their most recent off-campus university course or most recent school district-sponsored in-service activity. The results of the analysis of the data are briefly expressed in Table 4.3.

> Sub-problem 2: How important are the goals of off-campus university courses and school district-sponsored in-service activities?

Findings: Off-campus university courses. Mean ratings were calculated for goals and these were used for the rank ordering that appears in the table. The highest ranked goal was the one concerning making teachers knowledgeable in subject or content areas. It received a mean rating of 3.52. This rating, similar to those for the other four variables, fell between "moderate" and "great" on the five-point rating scale. Two other goal variables were assigned ratings which fell between "some" and "moderate" on the rating scale.

Versatility, which is to assist teachers who will be able to use

Table 4.3

Respondents' Perceptions of the Importance of Goals of an Off-campus University Course (N = 92)

		Ratings of Goals of Off-campus University Courses		
Number	Category	Mean[1]	Standard Deviation	Rank
9	To make teachers more knowledgeable in subject or content areas	3.52	1.13	1
10	To make teachers more adaptable to work within existing school systems	2.90	1.12	6
11	To increase the interpersonal skills of teachers	3.04	1.01	3
12	To increase the ability of teachers to integrate theory with practice	3.01	1.19	4.5[2]
13	To assist teachers to develop the necessary skills to implement change within schools	2.82	1.16	7
14	To assist teachers who will be able to use various teaching techniques	3.09	1.09	2
15	To assist teachers to deal effectively with individual differences	3.01	1.14	4.5[2]

[1] Means calculated for the five response categories were as follows: numeral 1 = none or little in importance; 2 = some; 3 = moderate; 4 = great and 5 = very great.

[2] denotes tied rank

various teaching techniques, received a mean rating of 3.09 and thus was second in rank. Ranking third, fourth, fifth, sixth and seventh respectively were interpersonal competence which aims at increasing the interpersonal skills of teachers. This was assigned a mean rating of 3.04. Both the application variable -- to increase the ability of teachers to integrate theory with practice -- and the variable which was concerned with increasing the ability of teachers to deal effectively with individual differences received a mean rating of 3.01. The goal variable which was concerned with making teachers more adaptable to work within existing school systems was ascribed a mean rating of 2.90. Change implementation which aimed at assisting teachers to develop the skills to implement change in schools was accorded a mean rating of 2.82 (Table 4.3).

Discussion. From the data, presented in Table 4.3, one may deduce that experienced teachers perceive off-campus university courses to be performing moderately on all goals. As is shown by the mean ratings, the variables fall into two clusters. Five goals -- knowledge, versatility, interpersonal competence, application, and dealing with individual differences -- fell between "moderate" and "great" on the rating scale. While four of these variables were more inclined toward the lower half of the moderate response category, the goal associated with knowledge was closer to the mid-point of the "moderate" and "great" response categories.

Adaptation and change implementation fell within the second cluster. Both goals were between "some" and "moderate", but were closer to the "moderate" end of the five-point rating scale as they were well above the mid-point mark between the two response categories. Based on these findings, one may infer that off-campus university courses are perceived by experienced teachers to be attaching moderate importance to the goals of in-service education.

Results from Further Analyses

For further analyses, respondents were grouped on the bases of sex, age (20-35 years, 36-45 years, and 46-65 years); completed years of teacher education (1-2 years, 3 years and 4 years or more); grade levels taught most often (elementary and secondary); major area of teaching concentration (language arts, social studies, math-science and unspecified); most recent off-campus university course (educational administration, educational psychology, educational foundations, educational curriculum and instruction, and arts); number of off-campus courses taken (1 or 2, 3 or 4, 5 or more); experience (1-5 years, 6-15 years and 16 years and over) and most recent school-district sponsored in-service activity (language arts, social studies, special education and unspecified).

Findings. The major findings which resulted from these analyses was that when respondents were grouped on the bases of sex, experience, grade levels taught most often, type of off-campus courses taken, and most recent school district-sponsored in-service activity, there was consensus among them with regard to the perceived importance of the goals of off-campus university courses. Table 4.4 briefly expresses the findings which were obtained by performing one-way analysis of variance when more than one pair of means was involved, and *t*-test for testing one pair of means.

Comparison based on age of respondents. One-way analysis of variance for each of the 7 goals yielded a statistical significant F ratio. The Scheffé procedure revealed that the significant difference lay between the 46 to 65 year olds, who allotted a mean rating of 4.06 to Item 9, and the 20 to 35 year olds who ascribed a mean rating of 3.15 to the same variable. While the rating for the 46 to 65 year olds fell

Table 4.4

Relationship Between Respondents' Characteristics and Perception of the Goals of Off-campus University Course (N = 92)

Independent Variable	Item number for there was a significant difference	Group	N	Ratings of Perceptions: Mean	Ratings of Perceptions: Standard Deviation
Age	9	20-25	34	3.15┐ 1	1.23
		36-45	35	3.63│	1.03
		46-65	18	4.06┘	0.94
Completed Years of Teacher Education	9	1-2 yrs.	23	3.35	1.07
		3 yrs.	21	3.00┐ 1	1.00
		4 yrs.	44	3.86┘	1.13
	10	1-2 yrs.	23	3.09	1.20
		3 yrs.	21	2.33┐ 1	1.91
		4 yrs.	43	3.07┘	1.20
Number of Off-campus Courses Taken	15	1-2	32	3.38┐	1.29
		3-4	26	2.92│ 1	1.13
		5 or more	26	2.62┘	0.85
Major Area of Teaching Concentration	10	Lang. Arts	22	2.31┐ 1	0.99
		Soc. Studies	31	2.61│	1.33
		Math-Science	13	3.06┘	1.06
		Unspecified	18	3.50	0.79
Sex	No significant differences between males and females				
Grade Levels Taught Most Often	No significant differences between elementary and secondary teachers				
Type of Off-Campus Course Taken	No significant differences among the five groups				
Experience	No significant differences among the three groups				
Most Recent School District In-Service	No significant differences among the four groups				

[1] Square bracket (]) denotes significantly different pairs of means.

between "great" and "very great", that of the 20 to 35 year olds fell between "moderate" and "great" on the five-point rating scale.

Comparisons based on respondents' level of education. When respondents were grouped on the basis of completed years of teacher education, respondents with 4 or more years of teacher education differed significantly from respondents with 3 years of teacher education. Both groups significantly differed on Items 9 and 10.

To Item 9 -- to make teachers more knowledgeable in subject or content areas -- respondents with 4 or more years of teacher education allotted a mean rating of 3.86. This rating was between "moderate" and "great" but closer to "great" on the five-point rating scale. Respondents who had 3 years of teacher education allotted a "moderate" rating of 3.00 to this goal.

A mean rating of 3.07, which was between "moderate" and "great" on the five point rating scale was assigned to Item 10 (Goals) by respondents who had 4 or more years of teacher education. Respondents with 3 years of teacher education viewed this goal as being between "some" and "moderate" on the rating scale, by assigning it a rating of 2.33. The rating assigned the variable by respondents with four years of teacher education was slightly above the moderate response category while that assigned it by respondents with 3 years was below the mid-point between "some" and "moderate". A summary of the data appears in Table 4.4.

Comparison based on number of off-campus courses taken. Respondents who had taken 1 or 2 off campus courses differed significantly from those who had taken 5 or more courses in their perception of the importance of Goal 7 (Item 15). A mean rating of 3.38 which fell between "moderate" and "great", but which was inclined towards the "moderate" response category on the five-point rating scale was assigned the variable by respondents who had taken 1 or 2 courses. On the other hand, a mean rating of 2.62, which fell between "some" and "moderate", but closer to "some" was assigned this variable by respondents who had taken 5 or more courses. Table 4.4 exhibits the data.

Comparison based on major area of teaching concentration. When respondents were grouped on the basis of major area of teaching concentration, language arts majors (mean: 2.31) differed significantly from mathematics-science majors (mean: 3.06) concerning their perception of Goal 2 (Item 10). The mean rating attributed this variable by language arts majors ranged between the "some" and the "moderate" response categories, but slightly below the mid-way mark between the two categories on the scale. The rating attributed by mathematics-science majors, though within the lower half between the "moderate" and the "great" categories, was between "moderate" and "great" on the five-point rating scale.

Discussion of further analyses. The data presented in Table 4.4 reveal that respondents with 4 or more years of teacher education gave a higher rating to the goal associated with knowledge as did respondents who were within the 46 to 65 years of age range. While the rating attributed to this variable by the former group was close to "great" but on the "moderate" end of the rating scale, the rating attributed by the latter group was between the "great" and the "very great" response categories of the rating scale. To this goal — to make teachers more knowledgeable in subject or content areas — respondents within the 25 to 35 years age group and respondents with 3 years of teacher education attributed a rating which was between "moderate" and "great", but closer to "moderate". From the data, it would appear that older and more educated respondents perceive the knowledge goal of off-campus university courses to be of great importance in terms of what is occurring while younger and less educated respondents view such goals as only moderately important.

The adaptation goal was perceived by two groups of respondents to be of "some" importance. Language arts as well as respondents with 3 years of teacher education rated this goal as being of "some" importance. Mathematics-science majors and respondents with 4 or more years of teacher education viewed this goal to be of moderate importance. The difference between the ratings of the last-mentioned groups did not exceed .1 on the five-point rating scale. The inference drawn from these findings is that, in the view of mathematics-science majors and more educated respondents, off-campus university courses are performing a "moderate" job in assisting teachers to adapt better to work within their school systems. For language arts majors and respondents with 3 years of education, this goal appears to receive "some" stress in off-campus university courses.

Item 15 -- to assist teachers who can deal effectively with individual differences among their students -- was rated by respondents who had taken 5 or more university courses as being of "some" importance. This item was rated by respondents who had taken 1 or 2 off-campus university courses as being of "moderate" importance. From the data it appears that while experienced teachers who took 1 or 2 off-campus university courses perceived off-campus university courses to be laying stress on assisting teachers to deal effectively with individual differences among students, experienced teacher respondents who had taken 5 courses held an opposing view.

Further analyses of the data revealed that there was a high degree of argreement among respondents, when grouped on the basis of the nine independent variables, concerning the perceived importance of the goals of off-campus university courses. In a comparison of means, following significant F Ratio and t-tests, of a possible 252 pairs of means, only 5 pairs differed significantly. Viewed in another way, 247 of 252 pairs of means were not significantly different. Thus, it may be concluded that experienced teachers on the whole, irrespective of the nature of the off-campus university course taken, or their experience, agreed on the ratings of the 7 goals of off-campus university courses.

Findings: School district-sponsored in-service activities. For each of the 7 goals, mean ratings were calculated and used as the basis for rank ordering what appears in Table 4.5. As is indicated in the Table, the highest ranked school district-sponsored in-service activity goals were each assigned a mean rating of 3.42. These goals were concerned with making teachers more adaptable to work within existing school systems and assisting teachers to use a variety of techniques. These goals which tied in rank were between the "moderate" and "great" response categories and slightly below the mid-point between the "moderate" and "great" response categories.

Ranking third in terms of mean rating was application -- the goal concerned with increasing the ability of teachers to integrate theory with practice. On the five-point rating scale this variable was similarly positioned as were adaptation and versatility.

Other goals which were between the "moderate" and "great" response categories on the five-point rating scale were: to make teachers more

Table 4.5

Respondents' Ratings of the Goals of the Most Recent School District-Sponsored In-Service Activities

		Ratings of School District-Sponsored In-service Activity		
Number	Category	Mean	Standard Deviation	Rank
9	To make teachers more knowledgeable in subject or content areas	3.32	1.03	4
10	To make teachers more adaptable to work within existing school systems	3.42	1.08	1.5[1]
11	To increase the interpersonal skills of teachers	3.22	0.88	6
12	To increase the ability of teachers to integrate theory with practice	3.41	0.96	3
13	To assist teachers to develop the necessary skills to implement change within schools	2.94	1.11	7
14	To assist teachers who will be able to use various teaching techniques	3.42	1.00	1.5[1]
15	To assist teachers to deal effectively with individual differences	3.25	1.10	5

[1] denotes tied rank.

knowledgeable in subject or content areas (mean: 3.32), to assist teachers to deal effectively with individual differences among students (mean: 3.25), to increase the interpersonal skills of teachers (mean: 3.22); and to assist teachers to implement program changes within their schools (mean: 2.94). These goals ranked fourth, fifth, sixth and seventh respectively.

Discussion. Respondents' perceptions of the goals of school district-sponsored in-service activities in terms of "what is occurring" were arranged in three distinct clusters. The first, second, and third ranking goals were in a cluster which positioned them between .08 and .09 away from the mid-point between "great" and "moderate" in importance. The fourth, fifth and sixth ranking goals were between .2 and .3 from the mid-point between "moderate" and "great" on the five-point rating scale. The seventh ranking goal which was between "some" and "moderate" in importance was about .6 less than "moderate" in importance on the rating scale. The data which are presented in Table 4.5 imply that respondents perceived school district-sponsored in-service activities to be optimizing their goals moderately.

Results from Further Analyses

In order to obtain additional information concerning respondents' perceptions of the goals of school district-sponsored in-service activities the data were further analyzed. One-way analysis of variance and t-tests were employed to the groups as was necessary.

In order to test for significant differences, respondents were grouped according to the 9 independent variables: (20-35 years, 36-45 years, and 46-65 years); sex; experience (1-5 years, 6-15 years, and 16 years or more); grade levels taught most often (elementary and secondary);

completed years of teacher education (1 or 2, 3, 4 or more); major area of teaching concentration (math-science, language arts, social studies and unspecified); type of off-campus courses taken (educational administration, educational psychology, educational curriculum and instruction, educational foundations and arts); number of off-campus courses taken (1 or 2, 3 or 4, 5 or more); and most recent school district-sponsored in-service activity (language arts, social studies, special education and unspecified).

Findings. The major finding which resulted from analysing the data further was that there was a high degree of agreement among respondents with regard to the ratings of the goals of school district-sponsored in-service activities in terms of perceived importance (what is presently occurring). Respondents agreed on the basis of type of off-campus courses taken, sex, age, grade levels taught most often, major area of teaching concentration, most recent school district-sponsored in-service activity, and completed years of teacher education. The significant differences which existed were within the experience, and number of off-campus courses taken, groups. These data are presented in Table 4.6.

Comparison based on number of off-campus courses taken. Respondent groups within this social category were significantly different in their perception of three goals of school district-sponsored in-service activities. As is briefly summarized in Table 4.6, these goals were adaptation (Item 10), application (Item 12), and dealing with individual differences among students (Item 15). The table shows that respondents who had taken 3 or 4 off-campus university courses were significantly different from those who had taken 5 or more courses. The former assigned a mean rating of 3.88 to Item 10 while the latter allotted a mean rating of 3.12 to this item. Although both ratings on the five-point scale were between the "great" and the "moderate" response categories, the rating allotted this variable by respondents who had taken 3 or 4 courses was less than "great", by .12 on the five-point rating scale. The rating allotted Item 10 by respondents who had taken 5 or more off-campus courses was .12 above the "moderate" response category.

Two groups of respondents differed significantly in their perception of the importance of the goal associated with application (Item 12). Respondents who had taken 3 or 4 courses allotted a mean rating of 3.77 which was between "moderate" and "great" on the five-point scale, to this variable. Respondents who had taken 5 or more courses assigned it a mean rating of 3.04. Both ratings were between "moderate" and "great" on the five-point rating scale, but the latter group of respondents held a less positive view.

In their perceptions of the importance of the goal which was concerned with assisting teachers to deal effectively with individual differences among students (Item 15), respondents who had taken 1 or 2 off-campus university courses placed it between "moderate" and "great" in importance by assigning it a mean rating of 3.64. The group from which they differed significantly -- respondents who had taken 5 or more off-campus university courses -- allotted a mean rating of 2.70 to this goal, thus placing it between "some" and "moderate" in importance on the rating scale.

Comparison based on experience of respondents. As is illustrated in Table 4.6, respondents within the experience groupings

Table 4.6

Relationship Between Teacher Characteristics and Perception of the Goals of School District-Sponsored In-Service Activities
(N = 92)

Independent Variable	Item Number	Group	N	Ratings of Perceptions Mean	Ratings of Perceptions Standard Deviation
Number of Off-campus Courses Taken	10	1-2 courses	28	3.32	1.09
		3-4 courses	25	3.88] [1]	1.01
		5 or more	25	3.12]	1.13
	12	1-2 courses	28	3.39	0.99
		3-4 courses	26	3.77] [1]	0.86
		5 or more	25	3.04]	0.98
	15	1-2 courses	28	3.64] [1]	1.10
		3-4 courses	26	3.31	0.97
		5 or more	25	2.70]	1.10
Teaching Experience	14	1-5 yrs	14	2.67]] [1]	0.78
		6-15 yrs	42	3.62]	0.99
		16 & over	28	3.39]	0.96
Age	No significant differences among the three groups				
Sex	No significant differences between males and females				
Completed Years of Teacher Education	No significant differences among the three groups				
Grade Levels Taught Most Often	No significant differences between elementary and secondary teachers				
Major Area of Teaching Concentration	No significant differences among the four groups				
Type of Off-campus Courses Taken	No significant differences among the five groups				
Most Recent School district In-Service	No significant differences among the four groups				

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[1] Square bracket (]) denotes significantly different pairs of means.

differed significantly in their perceptions of the importance of the goal which was concerned with assisting teachers who can utilize a variety of teaching methods (Item 14). There were significant differences between respondents with 1 to 5 years of teaching experience (mean: 2.67) and respondents with 6 to 15 years of experience (mean: 3.62). Respondents with 1 to 5 years of experience were also significantly different from those who had 16 years or more of experience (mean: 3.39). The table also reveals that respondents in the low age group attributed a mean rating to this goal, which was between "some" and "moderate", while the middle and upper age groups assigned ratings were were between "moderate" and "great".

Discussion of further analyses. By analyzing the data further, it was revealed that certain respondent groups differed significantly on the variables associated with adaptation, application and dealing with individual differences among students. On the variable associated with dealing with individual differences among students, the groups which had taken 1 or 2 off-campus university courses were significantly different from those who had taken 5 courses. These two groups were similarly significantly different in their perceptions concerning the importance of the corresponding goal of off-campus university courses. However, the ratings ascribed the school district-sponsored in-service goal, were slightly higher though within the same range -- "moderate" to "great" -- for the group which had taken 1 or 2 courses, and between "some" and "moderate" for the group who had taken 5 courses -- the rating of the school district-sponsored in-service goal was slightly higher.

Respondents who had taken 3 or 4 off-campus courses differed significantly from those who had taken 5 or more courses in their

Table 4.7

Comparison of Ideals of In-Service Education with Goals of Off-campus University Courses and School District-Sponsored In-Service Activities

Item Number	Variable	Ratings Mean	 Standard Deviation	 Rank
1	Ideal - knowledge	3.73	1.03	6
9	Off-campus Goal	3.52 [1]	1.13	1
9	School district Goal	3.32	1.03	4
2	Ideal - adaptation	3.83 [1]	1.02	4
10	Off-campus Goal	2.90	1.12	6
10	School district Goal	3.42	1.08	1.5[2]
3	Ideal - interpersonal competence	3.79 [1]	0.81	5
11	Off-campus Goal	3.04	1.01	3
11	School district Goal	3.22	0.88	6
4	Ideal - application	4.28 [1]	0.82	3
12	Off-campus Goal	3.01	1.19	5
12	School district Goal	3.41	0.96	3
5	Ideal - change implementation	3.63 [1]	0.93	7
13	Off-campus Goal	2.82	1.16	7
13	School district Goal	2.92	1.11	7
6	Ideal - versatility	4.29 [1]	0.72	2
14	Off-campus Goal	3.09	1.09	2
14	School district Goal	3.42	1.00	1.5[2]
7	Ideal - dealing with individual differences	4.38 [1]	0.85	1
15	Off-campus Goal	3.01	1.14	4
15	School district Goal	3.25	1.10	5

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[1] Square bracket (]) denotes significantly different pairs of means.

[2] denotes tied rank.

perceptions concerning the goal connected with adaptation and application. Judging from the mean score assigned this variable by the group which had taken 3 or 4 courses, it would appear that they felt strongly that the goal associated with adaptation was stressed above moderate importance by school districts. Their mean scores were .12 lower than "great" on the five-point rating scale, while the mean score attributed to this variable by respondents who had taken 5 or more courses was .12 above the "moderate" response category on the five-point rating scale. These findings leave one to wonder whether the number of off-campus university courses experienced teachers take, influence their perceptions of the goals of school district-sponsored in-service activities.

With regard to the goal associated with application, respondents who had taken 3 or 4 off-campus university courses assigned it a mean rating which was within the range of "moderate" to "great" on the rating scale, and less than .3 lower than "great". Respondents who had taken five courses rated this goal between "moderate" and "great" in importance. This rating, however, was only .04 above the "moderate" end of the scale.

Concerning Item 14, which was concerned with assisting teachers who can utilize a variety of teaching techniques within their classrooms, there were two significantly different pairs of means. Respondents with 1 to 5 years of teaching experience who attributed a rating which was between "some" and "moderate" in importance to this variable, significantly differed from respondents within the 6 to 15 years experience group who ascribed a rating which fell between "moderate" and "great" to this goal. The mean rating for the 1 to 5 years experience group was .5 less than "moderate", while that for the 6 to 15 years experience group was approximately .3 less than "great". For respondents who had 16 years or more of experience, the mean rating was .6 less than "great" on the five-point rating scale. These data imply that more experienced respondents are likely to perceive the versatility goal of school district-sponsored in-service activities as above average importance. Interviewees also commented that school districts were doing a great job in terms of helping them in the area of versatility.

By analysing the data further, it was deduced that experienced teachers, on the whole, agreed on the ratings of the 7 goals of school district-sponsored in-service activities. A comparison of means which resulted from significant F Ratio and t-tests revealed that of a possible 252 pairs of means, 247 were not significantly different. Put another way, only 5 of 252 pairs were significantly different. Furthermore, of the 9 social categories based on the independent variables, significant differences existed among only 2 of these categories. Based on these findings it may be inferred that, experienced teachers generally, did not disagree on the ratings of the 7 goals of school district-sponsored in-service activities.

Conclusion

The data presented above appear to provide substantial evidence that experienced teachers display preference for the inclusion of the 7 ideals -- knowledge, adaptation, interpersonal competence, application, change implementation, versatility, and dealing with individual differences -- in in-service education programs planned for them. The ideals were outlined in the conceptual framework (Chapter 2) of this dissertation. In addition, on the main instrument designed for the study, this category of teachers indicated that the ideals were "great" in importance, on a five-point rating scale.

In Table 4.7, where there is a presentation of the comparison of goals and ideals, respondents indicated by their ratings that all goals except the knowledge goal, were being achieved "moderately". In their view, off-campus university courses were achieving the adaptation goal between "some" and "moderate" but closer to "moderate". Both contexts of in-service education were perceived to be stressing the goal associated with change implementation between "some" and "moderate" in importance. From the data, it may be inferred that both off-campus university courses and school district-sponsored in-service activities were achieving the goals of in-service education only moderately. With the exclusion of the off-campus knowledge goal, all goals fell below the mid-point between the "moderate" and the "great" response categories, on the rating scale. Surprisingly enough, in the areas of change implementation and versatility, the goals of the two contexts of in-service education were similar in rank to the ideals of respondents. The application goal of school district-sponsored in-service activities ranked similarly with the application ideal of respondents. The findings seem to indicate that the perceived important goals of off-campus university courses and school district-sponsored in-service activities were dissimilar in most instances to the preferences of experienced teachers. As Table 4.7 indicated, for experienced teachers, the knowledge goal which is of first importance in off-campus university courses, is an ideal of sixth rank. The adaptation goal which is of primary importance to school district-sponsored in-service activities, is an ideal of fourth rank. Interpersonal competence which is an ideal of fifth rank was placed third in importance by off-campus university courses and sixth by school district-sponsored in-service activities. Off-campus university courses placed application fifth in importance while for school district-sponsored in-service activities and experienced teachers, this goal should have ranked third. Dealing with individual student differences, as has already been stated, was an ideal of first rank. Off-campus university courses placed this as a goal of fourth importance while for school districts it ranked fifth.

Of the two sub-problems investigated in this part of the study, there was substantial evidence that experienced teachers considered the seven ideals of in-service education to be of great importance (sub-problem 1). There was also evidence (sub-problem 2) that the two contexts of in-service education examined were only moderately achieving the goals of in-service education in the view of this group of teachers.

SUMMARY OF CHAPTER 4

This chapter was intended to report the findings which relate to sub-problems 1 and 2 of this study. These sub-problems dealt with experienced teachers' perceptions of the ideals and real goals of in-service teacher education. The most recent off-campus university course and the most recent school district-sponsored in-service activity in which respondents participated, formed the basis for the investigation.

With regard to the ideals of in-service education, respondents indicated that producing teachers who can deal with individual differences among students was of "great" importance. Producing teachers who can be versatile in using a variety of teaching techniques, producing teachers who can integrate theory with practice were also ideals of "great" importance. Producing teachers who can be knowledgeable in subject or content areas, producing teachers who can be adaptable within existing school systems, producing teachers who are competent in interpersonal relationships, and producing teachers who have the skills to implement change were perceived as ideals of "moderate" importance. Where there were significant differences among groups of participants, they were few in number.

Concerning experienced teachers' perceptions of the importance of the real goals of off-campus university courses -- what is happening currently -- the study sample rated, to make teachers more knowledgeable in subject or content areas as being between "moderate" and "great" in importance. Five other goal variables were similarly rated, but these were closer to "moderate". Of these, the two goals tied in rank. To increase the ability of teachers to integrate theory with practice, and to assist teachers to deal effectively with individual differences, tied in rank. Two goals were rated as being between "some" and "moderate" in importance. These were, to make teachers more adaptable to work within existing school systems, and to assist teachers to develop the necessary skills to implement change.

Relating to respondents' perceptions of the real goals of school district-sponsored in-service activities, all but one goal were rated as being between "moderate" and "great" in importance. To assist teachers to develop the necessary skills to implement change was rated as being between "some" and "moderate" in importance. The mean scores revealed that school districts were placing greatest emphasis on adaptation -- to make teachers more adaptable to work, versatility -- to assist teachers who will be able to use a variety of teaching techniques, and application --

to increase the ability of teachers to integrate theory with practice.

A comparison of experienced teachers' perceptions of the ideals (what ought to be) and their perceptions of real goals (what is) of in-service education revealed that school district-sponsored in-service activities, though rated "moderate" in performance, received higher mean scores on the goal variables than off-campus university courses. Further comparison also showed that off-campus university courses ranked similarly with school district-sponsored in-service activities and teachers' ideals on the versatility and change implementation variables. School district-sponsored in-service activities also ranked similarly with teachers' ideals on the application variable. The comparisons further disclosed that school district-sponsored in-service activities and off-campus university courses were not meeting all the preferences of experienced teachers. Assisting teachers to deal effectively with individual student differences, which is a preference of first rank to experienced teachers, is receiving low priority from these two contexts of in-service education. Adaptation, which is a low ranking preference to experienced teachers, is being stressed by school districts, and knowledge which ranks sixth in terms of experienced teachers' preferences is being greatly emphasized by off-campus university courses.

CHAPTER 5

EXPERIENCED TEACHERS' PERCEPTIONS AND PREFERENCES CONCERNING OFF-CAMPUS UNIVERSITY COURSES

A presentation of the findings of sub-problems 3, 4, 5, and 6 which relate to off-campus university courses is given in this chapter. Sub-problems 3 through 6 focus on experienced teachers perceptions concerning met objectives resulting from their participation in off-campus university courses; perceptions of the extent to which instructional activities utilized in off-campus university courses lend themselves to meeting the objectives of in-service teacher education; the perceptions and preferences of experienced teachers with regard to time allotted to the various instructional activities utilized in off-campus university courses; experienced teachers' perceptions and preferences as regards participating in organizing off-campus university courses, and the perceptions of experienced teachers as regards the effectiveness of off-campus university courses in assisting them to meet the fourteen objectives of in-service education. The most recent off-campus course in which respondents participated provided the basis for the present study.

This chapter consists of four parts. The first part is devoted to respondents' perceptions with regard to the extent to which the various instructional activities utilized in off-campus university courses lend themselves to meeting specified in-service objectives (sub-problem 3). The second is concerned with respondents' perceptions and preferences concerning time allotted to the various instructional activities utilized in off-campus university courses (sub-problem 4). The third relates to experienced teachers' perceptions and preferences with regard to their participation in organizing off-campus university courses (sub-problem 5), and the final part focuses on the effectiveness of off-campus university courses in assisting experienced teachers to meet objectives which are associated with knowledge, adaptation, interpersonal competence, change implementation, application, versatility, and dealing with individual differences among students (sub-problem 6).

A major purpose of this study was to identify experienced teachers' perceptions of met objectives, and instructional practices; their preferences and perceptions with regard to time allotted to off-campus courses, and school district-sponsored in-service activities, and their perceptions and preferences concerning participating in organizing off-campus university courses and school district-sponsored in-service activities as aspects of continuing teacher education. A second purpose of the study was to determine the effectiveness of off-campus university courses and school district-sponsored in-service activities as aspects of in-service education available to experienced teachers in the Province of Alberta, Canada.

In Chapter 1, the sub-problems of the study were formulated. One part of the questionnaire which was designed from the conceptual framework of the study (Chapter 2) sought to identify experienced teachers' preferences concerning the ideals of in-service education. Another part of the questionnaire sought to establish experienced teachers' perceptions with regard to the importance of the goals of in-service education. A third part of the questionnaire focused on experienced teachers' perceptions and preferences concerning time allotted to the instructional activities utilized in off-campus university courses and school district-sponsored in-service activities. Their perceptions as regards the extent to which the various instructional activities lend themselves to meeting the objectives of in-service education, and respondents' perceptions and preferences as regards their participation in organizing in-service education programs. The effectiveness of the two contexts of in-service education, in assisting experienced teachers to meet the objectives associated with knowledge, adaptation, application, change implementation, versatility, interpersonal competence, and dealing with individual differences among students was also considered.

I. EXPERIENCED TEACHERS' PERCEPTIONS OF THE INSTRUCTIONAL ACTIVITIES UTILIZED IN OFF-CAMPUS UNIVERSITY COURSES

Sub-problem 3: To what extent do instructional activities utilized in off-campus university courses lend themselves to meeting the objectives of in-service education?

Eight instructional activities including: listening to lectures and watching demonstrations, discussing topics and issues, working in groups, having an opportunity to try out a variety of teaching methods, working individually on issues and problems initiated or organized by teacher participants, receiving instruction through self-teaching, printed, or audio-visual materials, field trips, and engaging in role playing or other simulated activities were identified. Respondents were invited to rate these variables on a five-point Likert-type scale. Five was the highest rating, and one, the lowest. Table 5.1 summarizes the data.

Findings. As may be observed in Table 5.1, respondents rated

Table 5.1

Mean Rank Ordering of Perceived Effectiveness of Off-Campus Instructional Activities
(N = 92)

Item Number		Ratings of Activities		
		Means	St. Dev.	Rank Order
31.	Listening to lectures and watching demonstrations.	2.88	0.99	3
32.	Discussing topics and issues.	3.27	1.09	1
33.	Working in groups.	2.99	1.24	2
34.	Having the opportunity to try out a variety of teaching methods.	2.30	1.26	6
35.	Working individually on issues and problems initiated or organized by teacher-participants.	2.63	1.12	5
36.	Receiving instruction through self-teaching, printed or audio-visual materials.	2.64	1.16	4
37.	Field trips.	1.69	1.07	8
38.	Engaging in role playing or other simulated activities.	2.22	1.28	7

only one activity as falling between "moderate" and "great". This activity in question, discussing topics and issues, was assigned the highest mean rating of 3.27. Working in groups received second highest rating (mean: 2.99). Receiving third highest rating was listening to lectures and watching demonstrations (mean: 2.88). The fourth highest rated activity was receiving instruction through self-teaching, printed or audio-visual materials (mean: 2.64). Fifth, sixth, seventh and eighth in terms of rating were working individually on issues and problems initiated or organized by teacher-participants (mean: 2.63), having an opportunity at trying out a variety of teaching techniques (mean 2.30), engaging in role playing or other simulated activities (mean 2.22), and field trips (mean: 1.69). The first ranking instructional activity was rated between "moderate" and "great". Six instructional activities were rated between "some" and "moderate", and one activity receiving a rating which was between "little" or "none".

Discussion. The ratings assigned the 8 instructional activities are indicative of the perceptions of experienced teachers concerning the method of instruction utilized in off-campus university courses. As may be observed in Table 5.1, the second, third, fourth, and fifth ranking variables are in a cluster, while the lowest and highest ranking variables are somewhat in isolation. From the data, one may deduce that the majority of instructional activities are perceived as "moderately effective" in the extent to which they assist experienced teachers to meet off-campus university course objectives. Notwithstanding this comment, the data indicates that discussing topics and issues, working in groups, and listening to lectures and watching demonstrations were perceived by this group of respondents to lend itself more to meeting the objectives of off-campus university courses than did the other instructional activities.

It would appear that respondents might have rated the instructional activities in terms of what did occur in their off-campus courses rather than comparing activity with activity in terms of effectiveness or extent to which they lent themselves to meeting the objectives of in-service education. It is not surprising that experienced teachers rated field trips as the least effective instructional activity, given the time constraints within which off-campus university classes are conducted. What is disconcerting is that role playing and other simulated activities ranked as low as they did because such instructional activities could provide the means by which experienced teachers try out a variety of teaching methods. Simulation activities could also facilitate the introduction of the practical, or promote the application and versatility goals which experienced teachers perceived off-campus university courses to be achieving only moderately.

Results from Further Analyses

The data were further analyzed in order to determine the perceptions of respondents concerning off-campus instructional activities when grouped according to social categories. In order to facilitate these analyses, respondents were grouped on the bases of sex, age (20-35 years, 36-45 years and 46-65 years); experience (1-5 years, 6-15 years and 16 years and over); completed years of teacher education (1-2 years, 3 years, and 4 years or more); grade levels taught most often (elementary and secondary); major area of teaching concentration (social studies, language arts, math-science, and unspecified); number of off-campus university courses taken (1 or 2, 3 or 4, 5 or more); type of off-campus courses taken (educational administration, educational foundations, educational curriculum and instruction, educational psychology, and arts); and type of most recent school district-sponsored in-service activity participated in (language arts, social studies, special education, and unspecified).

Findings. The major findings of this study, concerning experienced teachers' perceptions of the instructional activities utilized in off-campus university courses indicated that respondents were in agreement with the ratings of the instructional activities, assigned by the study sample, when grouped on the bases of age, grade levels taught most often, completed years of teacher education, experience, number of off-campus courses taken recently, and most recent school district in-service activity in which respondents participated. Significant differences were evident when respondents were grouped on the bases of sex, type of off-campus university courses taken, and major area of teaching concentration. These groups differed only on variables 32 and 38. The data are shown in Table 5.2.

Comparison based on sex of respondents. When respondents were grouped on the basis of sex, they differed significantly on Items 32 and 38. The former was discussing topics and issues, and the latter, engaging in role playing or other simulated activities. On Item 32 male respondents (mean: 3.72) assigned a mean rating which fell between "moderate" and "great" to this instructional activity. This was somewhat similar to the rating assigned the variable by their female counterparts (mean: 3.12). The exception was that while male respondents' rating was closer to the "great" end of the rating scale, and female respondents' rating was closer to "moderate" (Table 5.2).

On Item 38, male respondents again had a higher rating (mean: 2.84) as opposed to the female respondents' (mean: 2.01). While the mean rating for male respondents was toward the "moderate" end of the rating scale, that for female respondents was toward the "some" end of the rating scale. The data are exhibited in Table 5.2.

Comparison based on type of off-campus courses taken. As is demonstrated in Table 5.2 respondents differed significantly when grouped

Table 5.2

Relationship Between Respondents' Characteristics and Perceived Effectiveness of Off-campus Instructional Activities (N = 92)

Independent Variable	Item Number when significant differences were found	Group	N	Perceptions Mean	 Standard Deviation
Sex	32	Male	21	3.72┐ 1	0.96
		Female	61	3.12┘	1.10
	38	Male	19	2.84┐ 1	1.46
		Female	58	2.01┘	1.16
Type of Off-Campus Courses Taken	38	Ed. Admin.	13	2.92┐ 1	1.55
		Ed. C.I.	9	1.00┤	1.00
		Ed. Psy.	14	1.36│	0.63
		Arts	26	2.42┘	1.45
		Ed. Fdns.	9	3.00	1.00
Major Area of Teaching Concentration	38	Lang. Arts	18	1.78┐┐ 1	0.94
		Soc. Stud.	27	1.92││	1.17
		Math-Sci.	13	2.54┘│	1.13
		Unspecified	16	2.88─┘	
Age	No significant differences among the three groups				
Experience	No significant differences among the three groups				
Grade Levels Taught Most Often	No significant differences between elementary and secondary teachers				
Completed Years of Teacher Education	No significant differences among the three groups				
Number of Off-Campus Courses Taken	No significant differences among the three groups				
Type of Most Recent School District Sponsored-In-service	No significant differences among the four groups				

[1] Square brackets (]) denote significantly different pairs of means.

on the basis of type of off-campus university courses taken. Within this social category, the difference existed on Item 38 -- engaging in role playing or other simulated activities. The difference existed between educational administration respondents (mean: 2.92), and respondents who had taken arts (mean: 2.42). The two mean ratings fell between "some" and "moderate", but the mean for educational administration respondents was closer to the "moderate" response category, while that of respondents who indicated that they had taken arts, was closer to the "some" response category on the five-point rating scale. In addition, respondents who had taken educational curriculum and instruction (mean: 1.00) significantly differed from those who had taken educational foundations (mean: 3.00) and from those who had taken educational administration (mean: 2.92). The data exhibited in Table 5.2 reveal that the mean rating for respondents who took educational curriculum and instruction was well within the "little or none" response category. On the other hand, that for respondents who took educational administration was between the "some" and the "moderate" response categories, but closer to "moderate". The mean rating for educational foundations respondents was within the "moderate" response category on the same scale.

Comparison based on major area of teaching concentration. Table 5.2 has revealed that significant differences existed between language arts (mean: 1.78) and mathematics-science majors (mean: 2.54); and between those who had not specified their major area of teaching concentration (mean: 2.88) and language arts with regard to Item 38. While language arts majors rated this variable as being between "little or none" and "some" in extent, mathematics-science majors and those who had not specified their major area of teaching concentration assigned it a rating which fell between "some" and "moderate" on the five-point rating scale.

Discussion of results of further analyses. In analyzing the data further, it was observed that respondents grouped on the basis of social categories, with the exception of those based on sex, type of off-campus courses taken, and major area of teaching concentration, exhibited a high degree on consensus on the ratings of the 8 instructional activities. The groups which were significantly different agreed with the study sample on all ratings, excluding Items 38 and 32. Where the significant differences occurred, only one difference slightly exceeded .8 on the five-point rating scale. In addition, in a comparison of means following a significant F Ratio or a t-test, it was found that of a possible 288 pairs of means only 6 pairs were significantly different. Interpeted in another way, 282 of 288 pairs of means were not significantly different. Thus, it is safe to assume that experienced teachers, regardless of their personal situation, level of participation in off-campus university course, or experience, held a similar view concerning the ratings of the 8 instructional activities utilized in off-campus university courses. The findings of this study lend support to the study of Schrieber (1975) who reported group work as an in-service method of instruction preferred by teachers. They also bolster Yarger and Brannigan's (1979) findings that seminars (discussing topics and issues), and workshops (having an opportunity to try out a variety of teaching methods) are instructional activities for which practising teachers display preference.

II. EXPERIENCED TEACHERS' PERCEPTIONS AND PREFERENCES CONCERNING TIME ALLOTTED TO INSTRUCTIONAL ACTIVITIES UTILIZED IN OFF-CAMPUS UNIVERSITY COURSES

Determining experienced teachers' perceptions and preferences with regard to time allotted to off-campus university course instructional activities was the task of sub-problem 4. In order to obtain the necessary information for this study, a list of 8 instructional activities was identified and respondents were asked to indicate their perceptions and preferences in terms of time allotment. The 8 instructional activities were: listening to lectures or watching demonstrations, discussing topics and issues, working in groups, having an opportunity to try out a variety of teaching methods, working individually on issues and problems which teachers initiated or organized, receiving instruction through self-teaching, audio-visual or printed materials, field trips, and engaging in role playing or other simulated activities.

Sub-problem 4: What are the perceptions and preferences of experienced teachers as regards time allotted to instructional activities utilized in off-campus university courses?

Findings. The data which are presented in Table 5.3 reveal that experienced teachers perceived that "quite a bit" of time was spent listening to lectures and watching demonstrations. The mean rating of responses for this activity in terms of allotted time was 4.02. The second ranking instructional activity was discussing topics and issues (mean: 3.50) which fell betweeen "moderate" and "quite a bit". Third in rank was receiving instruction through self-teaching, audio-visual or printed materials (mean: 2.78). This rating was between "some" and "moderate". Rating fourth in terms of time allotted, was working in groups (mean: 2.60)). This rating fell between "some" and "moderate" on the rating scale. Ranking fifth, in terms of mean rating, was working individually on issues and problems which teachers initiated or organized. This activity received a rating which fell between "some" and "moderate" (mean: 2.30). Having an opportunity to try out a variety of teaching

Table 5.3

Respondents' Perceptions and Preferences Concerning
Time Allotted to Instructional Activities
Utilized in Off-Campus University Courses
(N = 92)

	Mean Ratings of Allotted Time						t-Test Results	
Item Number[1]	Real	Std. Dev.	Rank	Ideal	Std. Dev.	Rank	Value	Significance
40	4.02	0.99	1	3.31	0.91	4	5.94	not sig.
41	3.50	0.95	2	3.94	0.79	1	3.97	0.000
42	2.60	1.13	4	3.40	0.91	3	6.75	0.000
43	1.93	0.13	6	3.58	0.20	2	10.86	0.000
44	2.30	1.16	5	3.30	1.07	5	7.92	0.000
45	2.78	1.25	3	3.18	1.03	6	2.87	0.005
46	1.32	0.71	8	2.67	1.16	7	9.31	0.000
47	1.78	1.06	7	2.58	1.10	8	6.63	0.000

[1] For the description see page 252.

methods (mean: 1.93), engaging in role playing or simulated activities (mean: 1.78), and field trips (mean: 1.32), ranked sixth, seventh and eighth respectively, receiving mean ratings which fell between "little or none" and "some".

Discussion. Information which is exhibited in Table 5.3 indicates that the time allotted to the 8 instructional activities utilized in off-campus university courses as perceived by respondents were rated from "quite a bit" to "little or none". The highest rating was 4.02 and the lowest was 1.32.

With regard to the preferences of respondents concerning time allotted to the instructional activities utilized in off-campus university courses, there were indications that the sample would prefer to have from a "moderate" to "quite a bit" of time devoted to all activities excluding field trips. This is revealed by the mean ratings which are summarized by Table 5.3.

The table also indicates experienced teachers' preferences in terms of time devoted to the instructional activities utilized in off-campus university courses. Discussing topics and issues was selected as the activity to which most time ought to be allotted. The mean rating of preferences for this activity was 3.94. This rating was .06 less than "quite a bit". Having an opportunity to try out a variety of teaching methods ranked second as the activity to which most time ought to be allotted. This activity received a mean rating of 3.58. Working in groups which ranked third, received a mean rating of 3.40. Listening to lectures and watching demonstrations was fourth with a mean of 3.31. Fifth was working individually on problems which teachers initiated or organized (mean: 3.30). Sixth was receiving instruction through audio-visual or self-teaching materials (mean: 3.18), and seventh and eighth respectively in terms of mean rating were field trips (mean: 2.67) and engaging in role playing and other simulated activities (mean: 2.58).

As one purpose of this study was to elicit experienced teachers' perceptions and preferences concerning time allotted to the instructional activities utilized in off-campus university courses, both ideal and real ratings were obtained, paired and compared. A real and ideal mean for each response was calculated. By subtracting the ideal mean from the real mean, a discrepancy for the entire sample was obtained. One exception was for Item 40; all other observed discrepancies but for this item were significant. The discrepancies indicated that in the perception of experienced teachers, there was a gap between what is (real) and what ought to be (ideal) with regard to time allotted to the instructional activities utilized in off-campus university courses. With the exception of Item 40, respondents expressed a desire for more time to be allotted to these instructional activities. Whereas the perceptions indicated that "quite a bit" of time was devoted to listening to lectures and watching demonstrations, respondents preferred a moderate amount of time to be devoted to this instructional activity. Respondents wanted more time devoted to discussing topics and issues than is the present practice.

Respondents' perceptions of time allotted to the instructional activities utilized in off-campus courses appear in four distinct clusters -- "quite a bit", "moderate", "some" and "little or none". The preferences are arranged in two clusters, "moderate" and "some". Whereas field trips and engaging in role playing and simulation activities were perceived to be allotted little or no time as instructional activities, respondents displayed preference for time allotment varying from "some" to "moderate" to these activities.

Preference was expressed for a time allotment ranging between "moderate" and "quite a bit" to the remaining activities. Discussing topics and issues took precedence with a mean of 3.94. Second in preference, was having the opportunity to try out a variety of teaching methods (mean: 3.58) which was allotted a perceived time which was between "little or none" and "some" (mean: 1.93), in their most recent off-campus university course. Working in groups ranked third in preference (mean: 3.40). Respondents preferred working individually on issues and problems, which teachers initiated or organized, to be allotted time ranging between "moderate" and "quite a bit". This activity ranked fifth in perceptions and fifth in prererence on the five-point rating scale.

Results from Further Analyses

Respondents were grouped on the bases of age (20-35 years, 36-45 years, 46-65 years); years of teaching experience (1-5 years, 6-15 years, and 16 years and over); grade levels taught most often (elementary and secondary); completed years of teacher education (1-2 years, 3 years and 4 years or more); sex; major area of teaching concentration (social studies, language arts, and unspecified); number of off-campus university courses taken (1 or 2, 3 or 4, 5 or more); type of off-campus university courses taken (educational administration, educational foundations, educational psychology, educational curriculum and instruction and arts), and type of most recent school district-sponsored in-service activity (language arts, social studies, special education and unspecified) in order to determine the effect of respondents' personal characteristics upon their perceptions and preferences. One-way analysis of variance yielded a significant difference among two pairs of means. The Scheffé procedure indicated that the difference existed between respondents who were in the age group category, on Item 46 (ideal). No other significant differences were evident.

Findings. The major findings of this aspect of the study were that respondents, when grouped on the bases of sex, completed years of teacher education, grade levels taught most often, major area of teaching concentration, type and number of off-campus courses taken, type of school district-sponsored in-service activity and experience, agreed in perceptions pertaining to the time allotted to the various instructional activities utilized in off-campus university courses. With regard to their preferences concerning time allotted to the various instructional activities employed in off-campus university courses, there were significant differences only with the age group category.

Comparison based on age of respondent. The significant difference which was evident within this social category existed among respondents within the three age groups. The 46 to 65 year olds (mean: 3.31) differed significantly from the 20 to 35 year olds (mean: 2.50). Similarly, the 46 to 65 year olds differed significantly from the 36 to 45 year olds (mean: 2.55). This difference concerned the ideal or preferred time allotted to field trips (Item 46). Within this social category, the 46 to 65 year olds rated this variable as falling between "moderate" and "quite a bit" in terms of preferred time allotment, while the preferences of the other two age groups fell between "some" and "moderate" on the five-point rating scale.

Discussion of further analyses. As may be inferred from the result of further analysis, respondents in all social categories excluding those grouped on the basis of age, were of one accord in their preferences (ideals) or what ought to be, with regard to time allotted to instructional activities in off-campus university courses. The indications were that while the 46 to 65 year olds displayed preference which fell between "moderate" and "quite a bit" in terms of time allotted to field trips; the 20 to 35 year olds as well as the 36 to 45 year olds preferred some time to be allotted to this activity. With regard to the perceptions of the sample concerning time allotted to instructional activities, there was no dissenting group.

Perhaps this is an opportune time to state that interviews with respondents revealed that the time allotted to off-campus courses was an issue. Interviewees felt that they needed more time to interact with university professors. Respondents within the 20 to 35 years age group, who were interviewed, also expressed a desire for more time to be devoted to off-campus university courses -- two or three evenings per week -- to enable them to cover course materials in depth as do students on the main campus. The allotment of more time to off-campus university courses would, in the view of these respondents, permit teachers outside the corporate limits of Edmonton to cover more than one course per semester.

Other interviewees felt that experienced teachers who participate in off-campus university courses ought to have scheduled time to visit the university campus in order to consult with professors, and to utilize the resource materials available in the library. Further analyses of the data led to the conclusion that respondents felt that there exists a need for restructuring the time allocated to the instructional activities which are utilized in off-campus university courses. The findings of this study give support to two studies reviewed in Chapter 2 of this dissertation. The studies precisely stated that teachers display preference for an allotment of more time to the instructional activities utilized in in-service education programs.

III. EXPERIENCED TEACHERS' PERCEPTIONS AND PREFERENCES CONCERNING PARTICIPATION IN ORGANIZING OFF-CAMPUS UNIVERSITY COURSES

This section of the chapter presents the findings which relate to experienced teachers' perceptions and preferences pertaining to their participation in organizing off-campus university courses. It is concerned with sub-problem 5 which was formulated in Chapter 1 of this dissertation. In order to obtain information to answer the question posed in sub-problem 5, five variables were identified, and experienced teachers were asked to rate them according to their perceptions and preferences. The variables included: defining the goals, setting the objectives, determining the course content, determining the mode of delivery, and evaluating the course.

> Sub-problem 5: What are the perceptions and preferences of experienced teachers as regards their participation in organizing off-campus university courses?

Findings. Experienced teachers' perceptions and preferences with regard to being involved in organizing off-campus university courses are briefly expressed in Table 5.4. The table reveals that evaluating the course (Item 62) received the highest rating (mean: 2.14). Next in rating was setting the objectives (Item 59) (mean: 1.75). Ranking third were defining the goals (Item 58) and determining the mode of delivery (Item 60) with a mean rating of 1.70, and ranking fifth was Item 61, determining the course content (mean: 1.69).

In indicating their preferences this group of teachers assigned a mean rating of 3.51 to evaluating the course. Setting the objectives received a mean rating of 3.40. Setting the goals, determining the course content and determining the mode of delivery each received a mean of 3.30.

The t-test results revealed the existence of a discrepancy between the real and ideal -- preferences and perceptions -- in all instances (Table 5.4).

Table 5.4

Respondents' Perceptions and Preferences Concerning Participation in Organizing Off-campus University Courses
(N = 92)

		Ratings of Responses			
		Real		Ideal	
Dependent Variables	Item Number	Mean	Std. Dev.	Mean	Std. Dev.
Defining the goals.	58	1.70[1]	1.00	3.30[1]	1.00
Setting the objectives.	59	1.75	1.00	3.40	1.10
Determining the course content.	60	1.69	1.01	3.30[1]	1.04
Determining the mode of delivery.	61	1.70[1]	1.02	3.30[1]	1.00
Evaluating the course.	62	2.14	1.05	3.51	1.00

[1] denotes tied rank.

Discussion. From the findings presented in Table 5.4 one may deduce that there is a discrepancy between what is and what ought to occur in relation to experienced teachers' participation in organizing off-campus university courses. Judging from the data, teachers participated minimally in evaluating off-campus university courses. This variable, though first in rank, received a rating which ranged between "some" and "moderate". The variables for all other aspects of organizing the course received mean ratings which ranged between "little or none" and "some" on the five-point rating scale. This is interpreted as having occurred rarely. Determining the course content was rated slightly lower than the other variables which fell between "little or none" and "some". The magnitude of the ideal means seems to indicate that experienced teachers prefer participation ranging between "moderate" and "quite a bit" in organizing off-campus university courses.

Results from Further Analyses

Respondents were grouped on the bases of social categories based on the 9 independent variables for further analyses of the data. These were: sex, age (20-35 years, 36-45 years and 46-65 years); completed years of teacher education (1-2 years, 3 years, and 4 years or more); experience (1-5 years, 6-15 years, 16 years and over); grade levels taught most often (secondary and elementary); major area of teaching concentration (language arts, social studies, math-science and unspecified); type of off-campus courses taken (arts, educational administration, educational psychology, educational foundations, and educational curriculum and instruction); number of off-campus courses taken (1 or 2, 3 or 4, 5 or more); and most recent school district-sponsored in-service activity (language arts, social studies, special education and non-specified).

Findings. Further analyses of the data revealed that respondents did not disagree on the ratings of the preferences. Disagreement which related to perceptions was among two groups of respondents -- sex and age -- and was associated with Items 58, 59 and 61. Table 5.5 exhibits the data.

Comparison based on age of respondents. One-way analysis of variance indicated significant differences among pairs of means on Items 58 and 61. The Scheffé procedure located the differences on Item 58 to exist between respondents who fell within the age group of 20 to 35 who rated this variable as ranging between "little or none" and "some" (mean:

Table 5.5

Relationship Between Respondents' Characteristics and Perceptions and Preferences Concerning Organizing Off-Campus University Courses (N = 92)

				Ratings of Perceptions and Preferences	
				Real	
Independent Variable	Item Number	Group	N	Mean	Std. Dev.
Age	58	20-35	32	1.44⌉ 1	0.56
		36-45	32	2.00⌋	1.32
		46-65	16	1.73	0.96
	61	20-35	32	1.41	0.71
		36-45	33	2.00⌉ 1	1.25
		46-65	16	1.56⌋	0.81
Sex	58	Male	20	1.33⌉ 1	0.48
		Female	65	1.85⌋	0.13
		Male	21	1.48⌉ 1	0.60
		Female	64	1.90⌋	0.90
Experience	No significant differences among the three groups				
Grade Levels Taught Most Often	No significant differences among elementary and secondary teachers				
Major Area of Teaching Concentration	No significant differences among the four groups				
Completed Years of Teacher Education	No significant differences among the three groups				
Most Recent School District-Sponsored In-Service	No significant differences among the four groups				
Most Recent Off-Campus Course	No significant differences among the five groups				
Type of Most Recent Off-Campus Course	No significant differences among the five groups				

[1] square bracket (]) denotes significantly different pairs of means.

1.44) and respondents within the 36 to 45 years age group who rated defining the goals as "some" (mean: 2.00) (Table 5.5).

The significant differences, with regard to Item 61, existed between the 36 to 45 years age group (mean: 2.00), and the 20 to 35 years age group (mean: 1.44). Respondents who were in the former age group were also significantly different from those who were in the 46 to 65 years age group (mean: 1.56). The mean ratings of both the 20 to 35 years age group and the 46 to 65 years age group fell between the "little or none" and the "some" response categories on the five-point rating scale. The 36 to 45 years age group assigned a mean rating which was equivalent to "some", to the variable, determining the mode of delivery.

Comparison based on sex of respondents. Results from "*t*-tests" revealed significant differences between male and female respondents on Items 58 and 59. Male respondents allotted a mean rating of 1.33, which ranged between "little or none" and "some" on the five-point rating scale, to Item 58. Female respondents assigned a mean rating of 1.85 to this variable -- defining the goals. The mean ratings assigned the variable by both groups of respondents fell between "little or none" and "some" on the five-point rating scale (Table 5.5).

With regard to Item 59 -- setting the objectives -- male respondents perceived it as ranging between "little or none" and "some" by attributing it a mean rating of 1.45. Similarly, female respondents perceived this variable to range between "little or none" and "some" and thus attributed it a mean rating of 1.90. Table 5.5 summarizes the data.

Discussion of results of further analyses. With regard to the ideal ratings of the participation variables, it may be inferred from further analyses of the data that there were no disagreements among respondents on the bases of sex, grade levels taught most often, experience, completed years of teacher education, number and type of off-campus university courses taken, age, recent school district in-service participation, and major area of teaching concentration. Where significant differences were obvious, they occurred among the three age groups and on the basis of sex with regard to only three real means. In no instance did these significant differences exceed the .6 level on the five-point rating scale.

From analyzing the data further, it may also be inferred that experienced teachers, regardless of their personal situation, level of participation and experience in in-service education, held similar perceptions and preferences concerning their participation in organizing off-campus university courses. For instance, of a possible 180 pairs of means compared for perceptions, and 180 pairs of means compared for preferences, following a significant F Ratio or _t_-test, only 5 pairs which related to perceptions were significantly different. Expressed differently, 175 of 180 pairs of means were not significantly different. Thus, it may be asserted that there was a high degree of consensus among respondents concerning their perceptions and preferences with regard to participation in organizing off-campus university courses.

IV. PERCEIVED EFFECTIVENESS OF OFF-CAMPUS COURSES IN IMPROVING EXPERIENCED TEACHERS' JOB PERFORMANCE

This section of the chapter reports the findings connected with experienced teachers' perceptions with regard to the effectiveness of their most recent off-campus university course in assisting them to meet specific objectives within their schools or classrooms.

Table 5.6

Respondents' Perceptions of the Effectiveness of Off-campus University Courses in Assisting Experienced Teachers Meet Specified Objectives

Independent Variable	Item Number	Percentage Distribution for Each Response Category (N = 92) 1	2	3	4	5	X^1	Mean	Standard Deviation	Rank
Identifying problems associated with the acquisition of knowledge in subject or content areas.	17	13.0	15.2	29.3	21.7	13.0	2.2	3.07	1.24	2
Acquiring new knowledge in your subject or content areas for use in the classroom.	18	12.0	18.5	16.3	21.7	22.8	3.3	3.28	1.40	1
Identifying problems associated with adapting to work within your school system.	19	22.8	27.2	15.2	20.7	6.5	3.3	2.58	1.28	11
Adapting better to work within your school system.	20	26.1	23.9	25.0	9.8	6.5	2.2	2.42	1.21	12
Identifying problems associated with interpersonal competence.	21	21.7	22.8	20.7	16.3	6.5	2.2	2.60	1.25	10
Demonstrating Interpersonal competence.	22	18.5	19.6	27.2	12.0	6.5	2.2	2.62	1.20	9
Identifying problems associated with the integration of theory with practice.	23	14.1	19.6	31.5	23.9	4.3	2.2	2.84	1.11	5^2
Integrating theory with practice in the classroom.	24	19.6	27.2	22.8	18.5	6.5	2.2	2.84	1.11	5^2
Identifying problems associated with implementing program changes within your school.	25	25.0	27.2	25.0	9.8	3.3	2.2	2.33	1.11	13
Implementing program changes within your school.	26	33.7	30.4	17.4	4.3	3.3	2.2	2.02	1.05	14
Identifying problems associated with utilizing a variety of teaching techniques.	27	17.4	22.8	28.3	10.9	9.8	2.2	2.70	1.23	8
Utilizing a variety of teaching techniques within your classroom.	28	20.7	21.7	23.9	15.2	5.4	2.2	3.01	1.21	3
Identifying problems associated with dealing with individual differences among students.	29	19.6	17.4	21.7	18.5	12.0	2.2	2.84	1.35	5^2
Dealing with individual differences among students.	30	20.7	21.7	17.4	21.7	7.6	2.2	2.71	1.3	7

[1] Numerals may be interpreted as follows: 5 Very Effective; 4 Effective; 3 Moderately Effective; 2 Somewhat Effective; 1 Not Effective; X Cannot Answer.

[2] denotes tied rank.

Fourteen objectives were identified, and the questionnaire, which was designed from Figure 2.5 (pp. 36-37) of this dissertation, used to collect the data. Respondents were asked to rate each objective on a five-point Likert-type rating scale. Five was the highest rating, and one was the lowest. Two objectives were associated with each of 7 variables which comprised knowledge, adaptation, interpersonal competence, application, change implementation, versatility and dealing with individual differences among students. While one objective required teacher-participants to identify problems associated with the development of certain competencies related to each of the 7 variables, the other objective required teacher-participants to demonstrate skills related to each of the 7 variables as a result of their participation in off-campus university courses. Respondents' ratings of the effectiveness of each objective fulfils the requirements of sub-problem 6, which was formulated in Chapter 1 of this dissertation, and with which this section of the chapter is concerned.

> Sub-problem 6: How effective are off-campus university courses in contributing to improving the performance of experienced teachers on the job?

Findings. Respondents' perceptions of the effectiveness of off-campus university courses in assisting them to meet specified objectives within their schools or classrooms are briefly expressed in Table 5.6. On a five-point rating scale, respondents assigned ratings to the 14 objectives specified above. The mean ratings and the rankings of these objectives are arranged in descending order: knowledge (means: 3.28 and 3.07); utilizing a variety of teaching techniques (mean: 3.01); identifying problems associated with individual differences (mean: 2.84); identifying problems associated with the integration of theory with practice (mean: 2.84); dealing with individual differences among students (mean: 2.71); identifying problems associated with using a variety of techniques (mean: 2.70); integrating theory with practice (mean: 2.63); interpersonal competence (means: 2.62 and 2.60); adaptation (means: 2.58 and 2.42); and change implementation (mean: 2.33 and 2.02). Eleven mean ratings were between "somewhat effective" and "moderately effective" on the rating scale. The first 3 ranking objectives fell between "moderately effective" and "quite effective".

Discussion. On the rating scale, the mean ratings of the effectiveness of off-campus university courses in assisting teachers to meet set objectives were arranged in 3 clusters. The objective which was associated with the acquisition of new knowledge in subject or content areas was rated as being between "moderately effective" and "quite effective" but was inclined toward the mid-point between the two response categories. This objective, by virtue of its position, on the five-point rating scale, was in isolation from the others as is illustrated in Table 5.7. A cursory look at the table reveals that this objective was similar in rank to its corresponding goal. However, the rating assigned this objective was indeed lower than that assigned the goal. One cluster included the objective which was connected with identifying problems associated with the acquisition of knowledge and utilizing a variety of techniques. Both objectives fell between "moderately effective" and "quite effective" on the five-point rating scale but were closer to the "moderately effective" end of the scale.

The second cluster consisted of the 2 objectives associated with adaptation, the two objectives associated with interpersonal competence, the two objectives associated with application, the objective associated

Table 5.7

Comparison of Respondents' Perceptions of Ideals and Related Off-Campus Goals and Objectives
(N = 92)

Category	Ratings of Ideals				Ratings of Goals				Ratings of Objectives			
	Item Number	Means	Std. Dev.	Rank	Item Number	Means	Std. Dev.	Rank	Item Number	Means	Std. Dev.	Rank
Knowledge	1	3.73	1.03	6	9	3.52	1.13	1	17	3.07	1.24	2
									18	3.28	1.40	1
Adaptation	2	3.83	1.02	4	10	2.90	1.12	6	19	2.58	1.28	11
									20	2.42	1.21	12
Interpersonal Competence	3	3.79	0.81	5	11	3.04	1.01	3	21	2.60	1.25	10
									22	2.62	1.20	9
Application	4	4.28	0.82	3	12	3.01	1.19	5	23	2.84	1.11	5[1]
									24	2.84	1.11	5[1]
Change Implementation	5	3.63	0.93	7	13	2.82	1.16	7	25	2.33	1.11	13
									26	2.02	1.05	14
Versatility	6	4.29	0.72	2	14	3.09	1.09	2	27	2.70	1.13	8
									28	3.01	1.21	3
Dealing with Individual Differences Among Students	7	4.38	0.85	1	15	3.01	1.14	4	29	2.84	1.35	5[1]
									30	2.71	1.30	7

[1] denotes tied ranks

with identifying problems associated with utilizing a variety of teaching techniques, and the 2 objectives associated with dealing with individual differences among students. This third cluster of objectives, fell between "somewhat effective" and "moderately effective", but was inclined toward the "moderately effective" end of the rating scale. The adaptation and knowledge objectives in this cluster were similar in their position on the rating scale when compared with the corresponding goals (Table 5.7), but the converse was true for the objectives associated with interpersonal competence, application, versatility, and dealing with individual differences which fell in this cluster, as their corresponding goals received higher ratings. Within this cluster three objectives tied in rank (Items 23, 24 and 29).

The fourth cluster included only the 2 variables associated with change implementation. These objectives fell between "somewhat effective" and "moderately effective", but were closer to the "somewhat effective" end of the scale. The corresponding goals to these objectives were closer to the "moderately effective" response category on the scale.

From the data presented in Table 5.7, it may be inferred that off-campus university courses are "moderately effective" in assisting experienced teachers to meet 10 of the 14 objectives of in-service education. While such courses are perceived to assist experienced teachers to meet the knowledge objectives most, they are least effective in assisting this group of teachers to meet the objectives which are associated with adaptation and change implementation. However, respondents in the present study indicated that adaptation and change implementation, though important, were not high ranking preferences or ideals.

Based on the input of off-campus university courses with regard to assisting teachers to deal effectively with individual differences among their students, one may infer that they are in effect optimizing their goals. A comparison of goals with met objectives substantiates this statement. With regard to the objectives associated with interpersonal competence, it would appear that off-campus university courses are slightly below par when perceived goals (what is occurring) are compared with met objectives, or the skills which teachers have actually acquired, as a result of their participation in this context of in-service education.

Results from Further Analyses

Further analyses were undertaken in order to determine whether respondents differed in their perceptions when grouped according to social categories. For these analyses, respondents were grouped on the bases of age (20-35 years, 36-45 years and 46-65 years); experience (1-5 years, 6-15 years, 16 years and over); completed years of teacher education (1-2 years, 3 years and 4 years or more); grade levels taught most often (elementary and secondary); major area of teaching concentration (social studies, language arts, math-science, and unspecified); number of off-campus courses taken (1 or 2, 3 or 4, 5 or more); type of off-campus courses taken (educational administration, educational foundations, educational curriculum and instruction, educational psychology and arts); and type of most recent school district-sponsored in-service activity (language arts, social studies, special education and unspecified). In analyzing the data further, one-way analysis of variance was resorted to when more than one pair of means were involved, and *t*-test was used to test for significant differences

Table 5.8

Mean Ratings of Effectively Met Objectives as Perceived by Sub-groups of Respondents (N = 92)

Independent Variable	Item Number[2]	Group	N	Ratings of Perceptions: Mean	Ratings of Perceptions: Standard Deviation
Sex	19	Male	20	3.10[1]	1.22
		Female	60	2.41	1.26
	25	Male	19	2.84[1]	1.17
		Female	61	2.17	1.05
Most Recent Off-campus Course	19	Ed. Admin.	15	3.33[1]	1.29
		Ed. C.I.	12	2.83	1.03
		Ed. Psy.	19	2.95	1.35
		Arts	29	1.83	0.97
		Ed. Fdns.	9	2.44	
	24	Ed. Admin.	14	2.06[1]	0.99
		Ed. C.I.	12	3.33	1.15
		Ed. Psy.	20	3.15[1]	1.04
		Arts	31	2.19	1.11
		Ed. Fdns.	9	2.67	1.33
	25	Ed. Admin.	13	3.00[1]	1.08
		Ed. C.I.	11	2.55	0.93
		Ed. Psy.	26	2.40	1.14
		Arts	29	1.90	0.90
		Ed. Fdns.	9	2.11	1.36
	27	Ed. Admin.	12	2.25	0.87
		Ed. C.I.	12	3.33[1]	1.23
		Ed. Psy.	19	3.21	1.27
		Arts	29	2.17	1.10
		Ed. Fdns.	9	3.00	1.33
	28	Ed. Admin.	12	1.83[1]	0.83
		Ed. C.I.	12	3.25	1.14
		Ed. Psy.	18	2.96	1.14
		Arts	28	2.29	1.15
		Ed. Fdns.	9	2.78	1.48
	29	Ed. Admin.	12	2.00[1]	0.74
		Ed. C.I.	12	3.58	1.00
		Ed. Psy.	19	3.47	1.39
		Arts	29	2.55	1.33
		Ed. Fdns.	9	2.56	1.59
	30	Ed. Admin.	12	1.67[1]	0.65
		Ed. C.I.	12	3.33	0.89
		Ed. Psy.	19	3.32	1.34
		Arts	29	2.52	1.27
		Ed. Fdns.	9	2.56	1.59
Age		No significant differences among the three groups			
Experience		No significant differences among the three groups			
Completed Years of Teacher Education		No significant differences among the three groups			
Major Area of Teaching Concentration		No significant differences among the four groups			
Grade Levels Taught Most Often		No significant differences between elementary and secondary teachers			
Number of Off-campus Courses Taken		No significant differences among the three groups			
Type of Most Recent School district-Sponsored In-service		No significant differences among the four groups			

[1] Square bracket denotes significantly different pairs of means.

[2] denotes item number for variable on which groups significantly differed.

when only one pair of means was involved.

Findings. The major findings of these additional analyses were that respondents grouped on the bases of age, experience, completed years of teacher education, grade levels taught most often, major area of teaching concentration, number of off-campus university courses taken, and most recent school district-sponsored in-service activity did not differ significantly in their perceptions of the effectiveness of off-campus university courses in assisting experienced teachers to meet the objectives associated with knowledge, adaptation, interpersonal competence, change implementation, application, versatility, and dealing with individual differences among students.

The significant differences, in perceptions, among respondents based on sex pertained to Items 19 and 25. Those based on most recent off-campus course taken, related to Items 19, 24, 25, 27, 29 and 30. The findings are summarized in Table 5.8.

Comparison based on sex of respondents. As is illustrated in Table 5.8, male and female respondents differed significantly concerning the effectiveness of off-campus university courses in assisting experienced teachers to meet the objectives which pertain to identifying problems associated with adapting to work within their school systems (Item 19). Male respondents assigned a mean rating of 3.10 to this variable, while female respondents assigned it a mean rating of 2.41. The mean rating for male respondents fell between "moderately effective" and "quite effective" and was more inclined toward the "moderately effective" response category on the rating scale. On the other hand, the mean rating of female respondents fell between the "somewhat effective" and the "moderately effective" response categories on the rating scale.

With regard to the second variable on which male and female respondents differed significantly -- identifying problems which are associated with program changes within your school -- a mean rating of 2.84 was assigned to this variable by male respondents. Female respondents ascribed a mean rating of 2.17 to this variable (Table 5.8). While the mean ratings fell between "somewhat effective" and "moderately effective" on the five-point rating scale, the rating assigned the variable by female respondents was closer to the "somewhat effective" end of the rating scale, while the male respondents' rating was close to the "moderately effective" end of the scale.

Comparison based on type of off-campus courses. The data indicated that 2 of the 5 respondents groups -- educational administration, educational curriculum and instruction, educational psychology, educational foundations, and arts -- were significantly different in their perceptions of the effectiveness of off-campus university courses in assisting experienced teachers to meet the objective associated with identifying problems associated with adapting to work within their school system (Item 19). Respondents who had taken educational administration (mean: 3.33) were significantly different from respondents who had taken arts (mean: 1.83). The mean ratings for respondents who had taken educational administration fell between "moderately effective" and "quite effective" but was more inclinced towards "moderately effective". The mean rating for arts respondents fell between "not effective" and "somewhat effective" and was inclined toward the "somewhat effective" end of the rating scale. The data are summarized in Table 5.8.

On Item 24 -- integrating theory with practice within the classroom -- there were three significantly different pairs of means.

Respondents who taken educational curriculum and instruction (mean: 3.33) differed significantly from arts respondents (mean: 2.19). Respondents who had taken educational psychology (mean: 3.15) differed significantly from arts respondents (mean: 2.19). The data also revealed that respondents who had taken educational curriculum and instruction differed significantly from respondents who had taken educational administration (mean: 2.06). While the mean ratings for arts and educational administration respondents were between the "somewhat effective" and the "moderately effective" response categories on the rating scale, both ratings were closer to "somewhat effective". On the other hand, the mean ratings for educational psychology and educational curriculum and instruction fell between "moderately effective" and "quite effective", but were inclined toward the "moderately effective" end of the rating scale. Table 5.8 exhibits the data.

With regard to Item 25 -- identifying problems associated with implementing program changes within your school -- there was one significantly different pair of means. Educational administration respondents (mean: 3.00) differed significantly from respondents who had taken arts (mean: 1.90) on the five-point rating scale. The mean rating assigned this variable by educational administration respondents was on the "moderately effective" end of the rating scale. The mean rating for arts respondents fell between "not effective" and "somewhat effective", but was inclined to the "somewhat effective" end of the rating scale (Table 5.8).

Concerning Item 27 -- identifying advantages associated with utilizing a variety of teaching techniques -- there were two significantly different pairs of means. Educational curriculum and instruction respondents (mean: 3.33) differed significantly from respondents who had taken arts (mean: 2.17). Similarly, respondents who had taken educational psychology (mean: 3.21) differed significantly from respondents who had taken arts. The mean scores assigned to this variable by the educational curriculum and instruction, and the educational psychology respondents fell between "moderately effective" and "quite effective". Both mean scores were closer to "moderately effective". Arts respondents' mean score fell between "somewhat effective" and "moderately effective", but was closer to the "somewhat effective" response category on the five-point rating scale (Table 5.8).

With regard to Item 28 -- utilizing a variety of teaching techniques within your classroom -- one pair of means was significantly different. Educational administration respondents (mean: 1.83) differed significantly from respondents who had taken educational curriculum and instruction (mean: 3.25). The mean assigned this variable by the educational administration respondents fell between "not effective" and "somewhat effective", but was closer to the "somewhat effective" end of the rating scale, the mean rating for the educational curriculum and instruction respondents was between "moderately effective" and "quite effective", but was closer to the "moderately effective" response category on the rating scale (Table 5.8).

Two pairs of means were significantly different on Item 29 -- identifying problems associated with dealing with individual differences among students. Educational curriculum and instruction respondents differed significantly from educational administration respondents, and educational psychology respondents differed significantly from educational administration respondents. A mean rating of 3.58 was assigned this variable by education curriculum and instruction respondents. This rating fell between "moderately effective" and "quite effective", but was closer to "quite effective" on the rating scale. A mean rating of 3.47 was ascribed to this variable by the educational psychology respondents. This rating fell between "quite effective" and "moderately effective", but was inclined towards the "quite effective" response category. For educational administration respondents, their mean rating of 2.00 assigned to Item 29 was at the "somewhat effective" end of the continuum. The data are exhibited in Table 5.8.

On Item 30 there were two significant pairs of means. One pair included educational administration (mean: 1.67) and educational psychology (mean: 3.32), and the other pair included educational administration, and educational curriculum and instruction (mean: 3.33). The mean ratings assigned this variable -- dealing with individual differences among students -- by educational pscyhology and educational curriculum and instruction respondents was between "moderately effective" and "quite effective", but was closer the "moderately effective" end of the rating scale, while the mean score ascribed this variable by educational administration respondents fell between "not effective" and "somewhat effective" but was inclined toward "somewhat effective". A summary of the data appears in Table 5.8.

Discussion of results from further analyses. The inference which may be drawn from the data presented as a result of further analyses is that respondents were of one accord concerning the perceived effectiveness of off-campus university courses in assisting experienced teachers to meet the 14 objectives specified in Figure 2.5 of this dissertation. When grouped on the bases of age, grade levels taught most often, major area of teaching concentration, completed years of teacher education, experience, number of off-campus courses taken, and most recent school district-sponsored in-service activity. Differences which were observed were negligible, and although statistically significant, they served to support a conclusion that respondents felt that off-campus university courses were moderately effective in assisting them to meet the 14 objectives outlined in Figure 2.5 of this dissertation.

The significant differences among respondents when grouped on the basis of sex imply that male respondents were of the opinion that off-campus university courses were "moderately effective" in assisting them to deal with problems associated with adaptation to work within their school systems, while female respondents felt that off-campus courses were only "somewhat effective" in assisting them. It seems that male respondents felt more positively that this context of in-service education was "somewhat effective" in assisting them to implement program changes within their schools, and female respondents appeared hesitant to attribute a "somewhat effective" rating to off-campus university courses, on this variable.

Respondents who had taken curriculum and instruction were quite positive in asserting that off-campus university courses were "moderately effective" in assisting them to meet objectives associated with the integration of theory with practice (application); identifying advantages associated with utilizing a variety of teaching techniques (versatility); and dealing with individual differences among students.

Educational administration respondents felt that off-campus university courses assisted them moderately in identifying problems associated with adaptation to work, and in implementing program changes within their schools. They appeared to view off-campus university courses as "somewhat effective" at their best in assisting them, as experienced teachers, to utilize a variety of teaching techniques, to integrate theory with practice within the classroom, and to deal with individual differences among students. Perhaps off-campus university courses focus more on adaptation and on the implementation of program changes for this group of respondents, but it is well worth focusing more on the integration of theory with practice, and on dealing with individual differences among students as well, since educational administrators must be practical in their dealing with individuals within their schools. Educational psychology respondents were of the opinion that off-campus university courses were "moderately effective" in assisting them to meet the objectives which are associated with utilizing a variety of teaching techniques, identify problems associated with dealing with individual differences among students, and in dealing with individual differences.

It appears as though arts respondents did not perceive off-campus university courses to be effective in assisting them to meet the 14 objectives moderately. This inference is drawn from examining the mean scores.

Further analyses of the data revealed that there were few significant differences among respondents, in their perceptions, concerning met objectives, when grouped on the bases of social categories. Of a total of 504 pairs of means compared through F Ratio and _t_-tests, at most, 12 pairs were significantly different. Viewed in another way, 492 of 504 means were not significantly different. This finding, therefore, serves to support a conclusion that experienced teachers were, on the whole, of similar perceptions concerning the effectiveness of off-campus university courses in assisting them to meet the 14 objectives specified in Figure 2.5 of this dissertation.

Interviews

During interviews with respondents selected from the five areas, namely, "Centre One", Centre Two", Centre Three", Centre Four" and "Centre Five" -- the 10 interviewees stated that experienced teachers clamoured for off-campus university courses which will help them to meet objectives which are associated with dealing with individual differences among students; versatility -- utilizing a variety of teaching techniques within their classrooms; and with application -- relating theory to practice. Certain comments made on questionnaires support the observations of these interviewees. One administrator wrote:

> There is too much theory and too little nitty gritty [sic] help received in the every day world of work. (Respondent #20).

The respondent who made the above observation further commented that due to lack of assistance from off-campus university courses to meet the objectives associated with application adequately, he failed to complete the requirements for a graduate diploma.

Respondent #36 wrote:

> Generally speaking, off-campus courses should be more pratically-oriented. Teachers furthering their education need classes which are practical along with material that can be utilized in the classroom.

Another respondent supported the foregoing comments in the following statement.

> Most of the "U of A" off-campus courses that I have taken seem to be too academic in nature. They are often limited in techniques, presentation methods, and application [sic] to the materials (texts and equipment) provided in the classroom. The content of off-campus courses that I have taken was not

> particularly beneficial in regard to classroom work at the primary level (Respondent #86).

Interviewees, despite the above comments, felt that off-campus university courses were assisting them to meet certain social and professional needs. For example, one interviewee stated that off-campus university courses enabled him to meet other teachers. Others asserted that they were helped to keep current with new theories and philosophies, and to discuss mutual problems with colleagues of similar interests.

Discussion of interviews. Interviewees' comments imply that off-campus university courses are knowledge-centered, and are not oriented towards the practical. It may also be inferred from the comments that experienced teachers believe that in-service courses planned for them ought to be oriented toward the integration of theory and practice (application), and ought to provide them with assistance to use new materials and aids competently in the classroom (versatility). Interviewees, however, felt that off-campus university courses were assisting them to fulfil certain social and professional needs.

SUMMARY

In this chapter the findings which are connected with sub-problems 3, 4, 5 and 6 were presented, and certain conclusions were drawn. This section of the chapter briefly summarizes the findings jointly with discussing the inferences which have been drawn.

With regard to sub-problem 3 there was substantial evidence that discussing topics and issues, group work, and listening to lectures and watching demonstrations are perceived as instructional activities which help experienced teachers most to meet the objectives associated with knowledge, adaptation, interpersonal competence, application, versatility, change implementation and dealing with individual differences among students. Field trips and other simulated activities were perceived to lend themselves least to meeting the objectives of in-service education.

Pertaining to time allotted to instructional activities in off-campus university courses (sub-problem 4), there was evidence that experienced teachers' preference was that more time be allotted to discussing topics and issues, to having an opportunity to try out a variety of teaching techniques, and to group work. This is opposed to their perceptions of current practice, whereby a great deal of time is devoted to listening to lectures and watching demonstrations and very little time is devoted to trying out a variety of teaching techniques. There was also evidence that respondents wanted time scheduled for visits to the main campus in order that they may utilize resource materials in the libraries and interact with professors. It was also established that experienced teachers wanted more time in class to allow them to cover course materials as do their counterparts on the main campus. In addition, they wished to have the opportunity to take more courses during the semester.

With regard to sub-problem 5, there was evidence that the participation of experienced teachers in organizing off-campus university courses was negligible. The only aspect of the course where there were signs of their participation was in the area of course evaluation. From the data presented, it was deduced that experienced teachers wish to participate moderately in organizing off-campus university courses.

Pertaining to sub-problem 6, respondents viewed off-campus university courses to be moderately effective in assisting them to meet the knowledge objectives and the objective relating to utilizing a variety of teaching techniques within the classroom. The clustering of 8 objectives more towards "moderately effective" than towards "somewhat effective", leads one to conclude that teachers perceive off-campus courses to be moderately effective in assisting them to meet these objectives. Off-campus university courses were perceived to be least effective in assisting experienced teachers to meet the objective associated with adapting better to work, and those associated with change implementation. Further analyses of the data indicated that all respondents agreed on the ratings of the knowledge and interpersonal competence objectives. One may therefore conclude that off-campus university courses are perceived to be making moderate contribution to the performance of experienced teachers on the job.

CHAPTER 6

EXPERIENCED TEACHERS' PERCEPTIONS AND PREFERENCES CONCERNING SCHOOL DISTRICT-SPONSORED IN-SERVICE ACTIVITIES

The present chapter reports findings on experienced teachers' perceptions and preferences with regard to instructional practice, which relate to school district-sponsored in-service activities, teacher participation in organizing in-service activities and the effectiveness of school district-sponsored in-service activities with regard to improving the performance of experienced teachers on the job. These findings are relevant to sub-problems 3, 4, 5 and 6 which were formulated in Chapter 1.

There are four parts to this chapter. The first presents the findings which pertain to experienced teachers' perceptions concerning the extent to which instructional activities lend themselves to meeting the objectives outlined in the conceptual framework (p. 34) of this dissertation. This pertains to sub-problem 3.

The second part of this chapter relates to sub-problem 4. It is concerned with experienced teachers' perceptions and preferences with regard to time allotted to various instructional activities utilized in school district-sponsored in-service activities.

Sub-problem 5 is the focus of the third part of this chapter. Hence, findings which relate to experienced teachers' perceptions and preferences with regard to participating in organizing school district-sponsored in-service activities are reported.

The final part of this chapter highlights findings which relate to sub-problem 6. This sub-problem reports the findings pertaining to experienced teachers' perceptions of the effectiveness of school district-sponsored in-service activities in assisting them to meet the 14 in-service objectives.

As outlined in Chapter 1, a major purpose of the study was to establish experienced teachers' perceptions concerning the goals of in-service education and their preferences pertaining to the ideals of in-service education. An additional purpose was to identify experienced teachers' perceptions and preferences with regard to instructional practice associated with school district-sponsored in-service activities; the perceptions and preferences of teacher-participants concerning participation in organizing school district-sponsored in-service activities; and to determine the effectiveness of school district-sponsored in-service activities in contributing to the performance of experienced teachers on the job.

I. EXPERIENCED TEACHERS' PERCEPTIONS OF THE INSTRUCTIONAL ACTIVITIES UTILIZED IN SCHOOL DISTRICT-SPONSORED IN-SERVICE

Sub-problem 3: To what extent do the instructional activities utilized in school district-sponsored in-service lend themselves to meeting the objectives of in-service education?

Information for this sub-problem was obtained by inviting experienced teachers to rate 8 identified instructional activities, using a five-point Likert-type rating scale. The 8 instructional activities included: listening to lectures and watching demonstrations, discussing topics and issues, working in groups, having an opportunity to try out a variety of teaching methods, working individually on issues or problems initiated or organized by teacher participants, receiving instruction through self-teaching, printed or audio-visual materials; field trips, and engaging in role playing or other simulated activities. Mean responses were calculated for each instructional activity and used as a guide for the rank ordering that is exhibited in Table 6.1.

Table 6.1

Respondents' Perceptions of Effectiveness of
School District-Sponsored In-Service
Instructional Activities
(N = 92)

		Ratings of Respondents' Perceptions		
Number	Instructional Activity	Mean[I]	Standard Deviation	Rank
31.	Listening to lectures and watching demonstrations.	3.22	1.01	2
32.	Discussing topics and issues.	3.12	1.01	3
33.	Working in groups.	3.23	1.17	1
34.	Having the opportunity to try out a variety of teaching methods.	2.53	1.33	6
35.	Working individually on issues and problems initiated or organized by teacher-participants.	2.69	1.19	4
36.	Receiving instruction through self-teaching, printed or audio-visual materials.	2.60	1.09	5
37.	Field trips.	1.92	1.24	8
38.	Engaging in role playing or other simulated activities.	2.41	1.33	7

[I] 1 = little or none; 2 = some, somewhat effective; 3 = moderate, moderately effective; 4 = great, quite a bit, quite effective; 5 = very great, very effective, a great deal.

Findings. As is shown in Table 6.1, respondents assigned the highest mean rating of 3.23 to working in groups. The rating of this activity fell somewhere between the "moderate" and "great" response categories on the rating scale. Other instructional activities which fell between "moderate" and "great" were: listening to lectures and watching demonstrations (mean: 3.22) which received second highest rating, and discussing topics and issues (mean: 3.12) which ranked third in terms of highest mean rating. Ranking fourth, fifth, sixth, and seventh in descending order and falling between "some" and "moderate" on the five-point rating scale were: working individually on issues and problems initiated or organized by teacher-participants (mean: 2.69), receiving instruction through self-teaching, printed, or audiovisual materials (mean: 2.60); having an opportunity to try out a variety of teaching methods (mean: 2.53), and engaging in role playing or other simulated activities (mean: 2.41). The eighth ranking activity --field trips -- received a mean of 1.92. This fell between "little or none" and "some" on the five-point rating scale.

Discussion. The perceived extent to which the 8 instructional activities utilized in school district-sponsored in-service activities meet the objectives of in-service education may be interpreted as the extent to which these activities are effective. From the data that are presented in Table 6.1, one may deduce that working in groups was perceived to be the most effective instructional activity. This was followed by listening to lectures and watching demonstrations, and discussing topics and issues. These 3 activities fell between "moderate" and "great" on the five-point rating scale, in terms of perceptions. All other activities fell between "some" and "moderate" on the same rating scale.

Field trips, and engaging in role playing or other simulated activities were perceived as activities which lent themselves least to meeting the in-service objectives. This is somewhat disconcerting because the preferences for versatility, namely, trying out a variety of teaching methods, and application, which is to relate theory to practice, could be fostered through utilization of these activities. One is led to wonder whether these two activities were allotted too little time or whether they were used minimally. Interestingly enough, both activities were also perceived as least effective and lending themselves least to meeting off-campus course objectives (Chapter 5).

Results of Further Analyses

In order to obtain additional information pertaining to the extent to which instructional activities utilized in school district-sponsored in-service activities meet the objectives outlined in the conceptual framework of this dissertation, additional analyses of the data were performed. One-way analysis of variance was employed where more than two pairs of means were entailed and *t*-tests were used when there was only one pair of means to be tested.

In order to facilitate further statistical analysis of the data, respondents were grouped into nine social categories. These were: sex; age (20-25 years, 36-45 years and 46-65 years); experience (1-5 years, 6-15 years, and 16 years and over); completed years of teacher education (1-2 years, 3 years and 4 years or more); major area of teaching concentration (social studies, language arts, math-science and unspecified); grade levels taught most often (elementary and secondary); most recent school district in-service (language arts, social studies, special education and unspecified); most recent off-campus university course (educational administration, educational curriculum and instruction, educational psychology, educational foundations, and arts); and number of off-campus courses taken (1 or 2, 3 or 4, 5 or more).

Findings. The major findings which resulted from analysing the data further were that among respondent groups based on sex, experience, completed years of teacher education, number of off-campus courses taken, and grade levels taught most often, there were no significant differences. Groups among which significant differences existed, included those based on age, major area of teaching concentration, most recent off-campus course taken, and most recent school district-sponsored in-service. Table 6.2 displays the data.

Comparison based on age of respondents. Within this social category respondents significantly differed on Items 33 and 38. On the former, the 20 to 35 year olds (mean: 2.90) differed significantly from the 36 to 45 year olds (mean: 3.64), and on the latter, the response of the 36 to 45 year olds (mean: 3.03) was significantly different from the responses of those within the 46 to 65 years age group (mean: 1.94) and from the 20 to 35 year olds (mean: 2.00). The mean rating ascribed working in groups (Item 33), by the 20 to 35 year olds fell between "some" and "moderate". The rating of the 36 to 45 year olds gave to this item was between "moderate" and "great" on the five-point rating scale (Table 6.2).

Engaging in role playing and other simulated activities received a mean rating which was equivalent to "some" from the 20 to 35 year old respondents. The rating assigned this variable by the 36 to 45 year olds fell slightly above "moderate" though between the "moderate" and "great" response categories. The 46 to 65 year olds perceived this variable to fall between "little or none" and "some" on the five-point rating scale. Table 6.2 exhibits the data.

Comparison based on major area of teaching concentration. Respondents grouped on the basis of major area of teaching concentration significantly differed on Items 33 and 34. There were 3 significantly different pairs of means within this social category. Respondents who had majored in language arts (mean: 2.57) differed significantly from social studies majors (mean: 3.59), on Item 33. While language arts majors rated this instructional activity, working in groups, to be between "some" and "moderate", social studies majors rated it to fall between "moderate" and "great" on the five-point rating scale (Table 6.2). Concerning Item 34, language arts majors (mean: 2.12) differed significantly from social studies majors (mean: 3.15). Respondents who had not specified their major area of concentration (mean: 1.92) also significantly differed from social studies majors. The ratings of this instructional activity -- having an opportunity to try out a variety of teaching methods -- fell into three ranges. Language arts majors placed it within the range that falls between "some" and "moderate". Social studies majors perceived it to fall between "moderate" and "great" and respondents who had not specified their major area of teaching concentration viewed this activity to fall between "little or none" and "some" on the five-point rating scale (Table 6.2).

Comparison on the basis of most recent off-campus course. There were 3 pairs of significantly different means when respondents were grouped on the basis of most recent off-campus course taken. These differences concerned the extent to which discussing topics and issues

Table 6.2

Comparison Between Characteristics of Respondents and Perceptions of the Effectiveness of School district-Sponsored Instructional Activities
(N = 92)

				Rating of Respondents' Perceptions	
Independent Variable	Item Number[1]	Group	N	Mean	Standard Deviation
Age	33	20-35	11	2.90] [2]	1.11
		36-45	31	3.64]	1.11
		46-65	17	3.06	1.25
	38	20-35	26	2.00] [2]	1.17
		36-45	29	3.03] [2]	1.32
		46-65	16	1.94]	1.24
Major Area of Teaching Concentration	33	Lang. Arts	21	2.57]] [2]	1.25
		Soc. Stud.	29	3.59]	0.82
		Math-Sci.	14	3.50]	1.09
		Unspec.	15	3.07	1.33
	34	Lang. Arts	17	2.12] [2]	1.36
		Soc. Stud.	27	3.15]]	1.20
		Math-Sci.	12	2.25] [2]	1.22
		Unspec.	13	1.92]	1.19
Most Recent Off-Campus Course	32	Ed. Admin.	15	3.53] [2]	1.19
		Ed. C.I.	10	3.10]	0.57
		Ed. Psych.	18	2.61] [2]	0.92
		Arts	29	3.09]	1.07
		Ed. Fdns.	9	3.78]	0.67
	38	Ed. Admin.	13	2.92] [2]	1.55
		Ed. C.I.	9	2.67]	1.00
		Ed. Psych.	14	1.36]	0.63
		Arts	26	2.42	1.45
		Ed. Fdns.	9	2.00	1.00
Most Recent School district In-service Activity	35	Lang. Arts	8	3.50] [2]	1.07
		Soc. Stud.	15	3.13]	1.19
		Spec. Educ.	9	2.11]	1.27
		Unspecified	39	2.41	1.07
Sex		No significant differences for males and females			
Experience		No significant differences among the three groups			
Completed Years of Teacher Education		No significant differences among the three groups			
Number of Off-campus University Courses Taken		No significant differences among the three groups			
Grade Levels Taught Most Often		No significant differences among elementary and secondary teachers			

[1] denotes item number for significantly different pairs of means. Variables are listed in Table 6.1.

[2] Square bracket (]) denotes significantly different pairs.

(Item 32), and engaging in role playing or other simulated activities (Item 38) lend themselves to meeting the in-service objectives of school district-sponsored activities.

Pertaining to Item 32, educational administration respondents (mean: 3.53) differed significantly from educational curriculum and instruction respondents (mean: 3.10). Educational psychology respondents (mean: 2.61) also significantly differed from respondents who had taken educational foundations (mean: 3.78). The mean ratings assigned this activity by educational administration, educational foundations, and educational curriculum and instruction respondents fell between "moderate" and "great", while that allotted this activity by respondents who had taken educational psychology was between the "some" and "moderate" response categories.

In connection with Item 38, educational administration respondents (mean: 2.92) differed significantly from educational psychology respondents (mean: 1.36). As the data reveal, educational administration respondents rated this activity as being between "some" and "moderate" while educational psychology respondents felt that it fell between "little or none" and "some" (Table 6.2).

Comparison based on most recent school district in-service activity. As is exhibited in Table 6.2, there was one pair of significantly different means in this social category. Respondents who participated in language arts workshops (mean: 3.50) differed significantly from respondents who participated in special education (mean: 2.11). The activity, on which these two groups differed in perceptions, was working individually on issues and problems initiated or organized by teacher participants (Item 35). While language arts respondents perceived this activity to range between "moderate" and "great", in extent to which it lends itself to meeting the in-service objectives of school district-sponsored in-service activities, special education respondents perceived it to range between "some" and "moderate" on the five-point rating scale.

Discussion of further analysis. Further analyses of the data revealed that on the whole, respondents, when grouped according to the social categories listed above, support the perceptions of the study sample concerning the perceived extent to which the 8 instructional activities lend themselves to meeting the in-service objectives of school district-sponsored in-service activities. As is evident from the report of the findings, 8 analyses of variance tests were performed for each of the independent variables. Only 11 of the 72 F Ratios were significant. These 11 related to 4 independent variables -- age, area of teaching concentration, most recent off-campus course, and most recent school district-sponsored in-service. For 5 of the 9 independent variables, no significant differences occurred. In the comparison of pairs of means following a significant F Ratio or *t*-test, at most two pairs of means differed significantly. Thus, of the 288 pairs of means compared only 11 were significantly different. Put another way, 277 of the 288 pairs compared were not significantly different. These findings lead to a generalization that, overall, teachers regardless of age, sex, area of teaching concentration, grade level taught most often, experience, most recent off-campus course taken, number of off-campus courses taken, completed years of teacher education and recent school district in-service participation agreed, rather than differed, concerning the rating of the 8 instructional activities in terms of the perceived extent to which they lend themselves to meeting the objectives outlined for school district-sponsored in-service for teachers. Apparently, these ratings were much the same regardless of personal background of respondents, the situation in which respondents found themselves, or the extent and nature of respondents' experience in school district-sponsored in-service activities.

II. EXPERIENCED TEACHERS' PERCEPTIONS AND PREFERENCES CONCERNING TIME ALLOTTED TO INSTRUCTIONAL ACTIVITIES UTILIZED IN SCHOOL DISTRICT-SPONSORED IN-SERVICE ACTIVITIES

This section of the chapter reports findings which are pertinent to sub-problem 4. The necessary information was obtained by inviting respondents to express their perceptions and preferences as regards time allotted to 8 identified instructional activities utilized in school district-sponsored in-service activities. The 8 instructional activities included listening to lectures and watching demonstrations, discussing topics and issues, working in groups, having an opportunity to try out a variety of teaching methods, working individually on problems which teachers initiated or organized, receiving instruction through self-teaching, audio-visual or printed materials; field trips, and engaging in role playing or other simulated activities were rated on a five-point rating by respondents. Each instructional activity was assigned a real (perceived) mean rating and an ideal (preferred) mean rating by respondents.

Sub-problem 4: What are the perceptions and preferences of experienced teachers as regards time allotted to instructional activities utilized in school district-sponsored in-service activities?

Findings. Mean ratings for preferences and perceptions were calculated for each instructional activity, and these were used as the basis for the rank orderings which appear in Table 6.3. The highest ranked instructional activity as regards "real" time was listening to lectures or watching demonstrations (Item 49). This variable received a mean rating of 3.98 and fell between "moderate" and "great" on the five-point rating scale. Second in rank was discussing topics and issues (Item 50) (mean: 2.92) which was assigned a real mean rating that fell between "some" and "moderate". The third ranking activity (Item 51) -- working in groups -- had a real mean rating of 2.72. The rating of this activity fell between "some" and "moderate" on the rating scale. Fourth in rank was Item 54 -- receiving instruction through audio-visual printed and self-teaching materials -- this variable received a mean rating of 2.68, and fell between "some" and "moderate" on the five-point rating scale. The fifth, sixth, seventh and eighth ranking activities fell between "little or none" and "some". The fifth ranking (Item 53), was the activity, working individually on issues and problems which teachers initiated or organized. Having the opportunity to try out a variety of teaching methods (Item 52) was assigned a mean rating of 1.84. This activity ranked sixth. Engaging in role playing or other simulated activities (Item 56) was the seventh ranking activity. It received a mean rating of 1.80. Receiving the lowest rating, and thus ranking last, was -- field trips -- (Item 55). It was allotted a mean rating of 1.40.

The preferences in terms of time allotted to instructional activities are exhibited in Table 6.3. The data indicate that respondents assigned ratings which fell between "moderate" and "great" to six instructional activities. These were: discussing activities and issues (mean: 3.92), having an opportunity to try out a variety of teaching methods (mean: 3.60), working in groups (3.51), working individually on

Table 6.3

Comparison Between Perceived and Preferred Time Allotted to School District-Sponsored In-Service Activities

(N = 92)

Item Number	Activity	Ratings of Respondents' Perceptions and Preferences: Real Mean[1]	Rank	Ideal Mean[2]	Rank	t-Test Result: Difference	Significance
49	Listening to lectures of watching demonstrations.	3.98	1	3.21	5	-.77	0.000
50	Discussing topics and issues.	2.92	2	3.92	1	-1.00	0.000
51	Working in groups.	2.72	3	3.56	3	-.84	0.000
52	Having the opportunity to try out a variety of teaching methods.	1.84	6	3.60	2	-1.76	0.000
53	Working individually on issues and problems which teachers initiated or organized.	1.90	5	3.30	4	-1.40	0.000
54	Receiving instruction through audio-visual, printed or self teaching materials.	2.68	4	3.20	6	-.52	0.000
55	Field trips.	1.40	8	2.90	7	-1.50	0.000
56	Engaging in role playing or any other simulated activities.	1.80	7	2.76	8	-.96	0.000

[1] denotes perceived mean.

[2] denotes preferred mean.

issues and problems which teachers initiated or organized (mean: 3.30), listening to lectures or watching demonstrations (mean: 3.21), and receiving instruction through audio-visual, printed or self-teaching materials (mean: 3.20). The remaining 2 activities received mean ratings which fell between "some" and "moderate" on the five-point rating scale. Field trips was assigned a mean rating of 2.90 and engaging in role playing or other simulated activities received a mean of 2.76.

Discussion. In terms of perceived allotted time to the 8 instructional activities utilized in school district-sponsored in-service activities, the ratings appear in two distinct clusters. One cluster fell between the "moderate" and the "great" response categories, and the other between "little or none" and "some". The former cluster included: discussing topics and issues, working in groups, and receiving instruction through audio-visual, printed, or self-teaching materials. The latter consisted of having an opportunity to try out a variety of teaching methods, working individually on issues and problems which teachers initiated, field trips, and engaging in role playing or other simulated activities. One instructional activity was not in any of the two clusterings mentioned above. This was, listening to lectures and watching demonstrations.

A comparison of the mean ratings of perceptions and preferences, revealed a discrepancy between what is, and what ought to be. With 2 exceptions, the data seem to indicate that experienced teachers prefer a time allotment falling between "moderate" and "great" devoted to 6 instructional of the 8 instructional activities utilized in school district-sponsored in-service activities. The preferred time allotment for field trips, and engaging in role playing and other simulation activities, was between "some" and "moderate".

Results of Further Analyses

Further analyses of the data were undertaken in order to obtain additional information with regard to experienced teachers' perceptions and preferences as regards time allotted to the instructional activities utilized in school district-sponsored in-service activities. As a consequence, respondents were grouped on the bases of age (20-35 years, 36-45 years and 46-65 years); sex; experience (1-5 years, 6-15 years and 16 years or more); grade levels taught most often (elementary and secondary); major area of teaching concentration (language arts, social studies, math-science and unspecified); most recent school district-sponsored in-service (language arts, special education, social studies, and unspecified); most recent off-campus university course (educational administration, educational curriculum and instruction, educational psychology, educational foundations, and arts); number of off-campus university courses taken (1 or 2, 3 or 4, 5 or more); and completed years of teacher education (1 or 2, 3, and 4 or more). In testing for significant differences among respondent groups, one-way analysis of variance was employed where more than one pair of means were involved. T-tests were utilized where one pair of means was to be tested.

Findings. Further analyses of the data as is displayed in Table 6.4 revealed that there were no significant differences among certain respondent groups. These included groups based on completed years of teacher education, number of off-campus courses taken, and most recent off-campus courses taken. There were significant differences among groups based on sex, age, teaching experience, grade levels taught most often, major area of teaching concentration, and most recent school district-sponsored in-service activity. These analyses also revealed that the majority of respondents did not disagree on the ideal and real ratings assigned: discussing topics and issues (Item 50), working individually on issues and problems which teachers initiated or organized (Item 53), and engaging in role playing or any other simulated activities. Table 6.4 exhibits the data.

Comparison based on sex of respondents. When analyses were done among groups based on sex of respondents, significant differences were identified for two of the 16 time allotment variables. Within this social category male respondents (mean: 2.94) and female respondents (mean: 3.75) differed significantly in their preference for discussing topics and issues (Item 52) in terms of time allotment. On the five-point rating scale, female respondents ascribed a mean rating which fell between "moderate" and "quite a bit" to this variable, while male respondents ascribed it a rating which placed it between "some" and "moderate". Within this social grouping, respondents also differed significantly in preferences for field trips (Item 55). Female respondents allotted this variable a mean rating of 3.00 which indicated a "moderate" preference on the five-point rating scale. Male respondents assigned it a mean rating of 2.29 which fell between "some" and "moderate" (Table 6.4).

Comparison based on age of respondents. The analyses done among groups based on age of respondents revealed significant differences for one of the 24 time allotment variables. Within this social category there was one significantly different pair of means with regard to Item 51 in terms of time allotment. The 20 to 35 year olds (mean:

Table 6.4

Comparison Between Respondents' Characteristics and Perceptions and Preferences Concerning Time Allotted to School district-Sponsored In-service Activities
(N = 92)

Independent Variable	Item Number[1]	Group	N	Ratings of Perceptions or Preferences Mean	 Standard Deviation
Sex	52^4	Male	18	2.94┐	1.06
		Female	63	3.75┘2	1.03
	55^4	Male	17	2.29┐	1.16
		Female	59	3.00┘2	1.11
Age	51^4	20-35		2.36┐	1.22
		36-45		3.10┘2	1.22
		46-65		2.53	1.22
Teaching Experience	52^4	1-5 yrs.	12	3.93┐2	0.90
		6-15 yrs.	41	3.73│	0.98
		16 & over	26	3.12┘	1.21
	54^3	1-5 yrs.	13	1.85┐	0.68
		6-15 yrs.	43	2.91┘2	1.13
		16 & over	26	2.69	1.32
Grade Levels Taught Most Often	52^3	Elementary	52	2.08┐	1.25
		Secondary	23	1.52┘2	0.85
	55^3	Elementary	50	1.56┐	0.91
		Secondary	23	1.13┘2	0.34
Most Recent School district In-service Activity	49^4	Lang. Arts	8	3.38┐	1.06
		Soc. Stud.	16	2.63┘┐2	0.81
		Spec. Educ.	11	3.18│	0.87
		Unspecified	46	3.37┘	0.93
	51^3	Lang. Arts	8	2.88	1.13
		Soc. Stud.	17	3.24┐	1.35
		Spec. Educ.	11	1.91┘2	0.83
		Unspecified	46	2.59	1.24
Major Area of Teaching Concentration	49^4	Lang. Arts	20	3.50┐	0.89
		Soc. Stud.	31	3.29│	0.91
		Math-Sci.	14	3.28│2	0.96
		Unspecified	15	2.60┘	0.83
Completed Years of Teacher Education		No significant differences among the three groups			
Number of Off-campus Courses Taken		No significant differences among the three groups			
Most Recent Off-campus Course		No significant differences among the five groups			

[1] denotes item number of variable on which significant differences existed.

[2] square bracket (]) denotes significantly different pairs of means.

[3] denotes real (perception).

[4] denotes ideal (preference).

2.36) significantly differed from the 36 to 45 year olds (mean: 3.10). On the five-point rating scale the 20 to 35 year olds assigned this variable, a preferred mean rating which fell between "some" and "moderate", while the 36 to 45 year olds rated this item -- working in groups -- as being between the "moderate" and the "quite a bit" response categories. The data are summarized in Table 6.4.

Comparison based on experience of respondents. When analyses were done among groups based on experience of respondents, significant differences were identified for 2 of the 24 time allotment variables. Within this social category respondents with 1 to 5 years of experience (mean: 3.93) and respondents with 16 years or more of experience (mean: 3.12) differed significantly in preferences for having an opportunity to try out a variety of teaching methods (Item 52). On a five-point rating scale, respondents with 1 to 5 years of experience indicated a preferred time allotment of between "moderate" and "quite a bit". The preference of the 16 years or more experience group, though between "moderate" and "quite a bit", was only .12 greater than "moderate".

Within this social category respondents were also significantly different in their perceptions concerning receiving instruction through audio-visual, printed, or self-teaching materials (Item 54). Respondents within the 1 to 5 years of experience group (mean: 1.85) rated this activity as falling between "little or none" and "some". Respondents within the 6 to 15 years experience group (mean: 2.91) indicated that this activity was between the "some" and the "moderate" response categories, but closer to "moderate" on the five-point rating scale (Table 6.4).

Comparison based on grade levels taught most often. The analyses done between groups based on grade levels taught most often by respondents, exhibited significant differences for 2 of the 16 time allotment variables. Within this social category respondents who taught elementary grades (mean: 2.08) and respondents who taught secondary grades (mean: 1.52) differed significantly in their perception of having an opportunity to try out a variety of teaching methods (Item 52). On a five-point rating scale respondents who taught elementary grades perceived this activity in terms of time allotment to fall between "some" and "moderate" response categories, while teachers of secondary grades rated the time allotment to this activity as falling between "little or none" and "some".

Within this social grouping teachers of secondary grades (mean: 1.13) differed significantly from respondents who taught elementary grades (mean: 1.56) in terms of perceived time allotted to field trips. Both groups of respondents rated this activity as falling between "little or none" and "some" on the five-point rating scale, but the rating assigned this activity by secondary teachers was closer to "little or none" -- the lowest category on the five-point rating scale. The rating assigned this activity in terms of allotted time by elementary teachers was above the mid-point between the "little or none" and "some" response categories (Table 6.4).

Comparison based on most recent school district in-service. When analyses were done among groups based on most recent school district-sponsored in-service activities participated in by respondents, significant differences were identified for 2 of the 48 time allotment variables. Within this social category respondents who had taken social studies (mean: 2.63) and respondents who had not specified the activity in which they participated (mean: 3.37) differed in their preferences with regard to time allotted to listening to lectures and watching demonstrations (Item 49). On a five-point rating scale, the respondents who had participated in social studies activity indicated a time allotment preference which fell between "some" and "moderate", while respondents who had not specified nature of the activity in which they recently participated indicated a time allotment preference which fell between "moderate" and "quite a bit" (Table 6.4).

Within this social category, respondents who had taken social studies (mean: 3.24) significantly differed from respondents who had taken special education (mean: 1.91) with regard to the perceptions of time allotted to working in groups. On the five-point rating scale social studies respondents indicated a preferred time allotment which fell between "moderate" and "quite a bit" to this activity. Special education respondents indicated a preference which fell between "little or none" and "some" in terms of time allotment.

Comparison based on major area of teaching concentration. The analyses done among groups based on area of teaching concentration revealed significant differences for one of the 48 time allotment variables. Within this social category, respondents who majored in language arts (mean: 3.50) and respondents who had not specified their major area of teaching concentration (mean: 2.60) differed significantly in their preferences with regard to time allotted to listening to lectures and watching demonstrations (Item 49). On the five-point rating scale, language arts respondents indicated that they preferred a time allotment ranging between "moderate" and "quite a bit" while respondents who had not specified their major area of teaching concentration indicated a preferred time allotment which ranged between "some" and "moderate" (Table 6.4).

Discussion of further analyses. Further analyses of the data served to emphasize the high degree of consensus among respondents with regard to their perceptions and preferences concerning time allotted to the 8 instructional activities utilized in school district-sponsored in-service for teachers. As is evident from the report of the findings, 8 analyses of variance tests were performed for each of the 9 independent variables for preferences and for perceptions. Seven of the 46 F Ratios and 2 of the 16 *t*-tests were significant for perceptions. Two *t*-tests and 2 F Ratios were significant for preferences. These related to 6 independent variables. For 3 of the 9 independent variables, no significant differences occurred for preferences, and for 5 of the 9 independent variables no significant differences occurred for perceptions. Thus, of the 288 pairs of means compared for perceptions, only 4 were significantly different, and of 288 pairs compared for preferences, only 6 were significantly different. Put another way, 284 of 288 pairs of means were not significantly different for perceptions, and 282 of 288 pairs for preferences were not significantly different. These findings lead to a genereralization that over all, experienced teachers, regardless of social category, agreed, rather than differed in perceptions and preferences concerning time allotted to the 8 instructional activities utilized in school district-sponsored in-service activities. Apparently, the ratings were much the same regardless of personal background of respondents, the situation in which respondents found themselves, and the extent and nature of respondents' experience in school district-sponsored in-service activities.

Further analyses of the data serve to support a conclusion that there is a gap between what is and what ought to be, with regard to time allotted to the instructional activities utilized in school district-sponsored in-service for experienced teachers. These analyses also serve to strengthen the inference that respondents, irrespective of social category, wish more time allotted to all instructional activities, excluding listening to lectures and watching demonstrations. In fact, respondents display preference for less time to be allotted to this activity, and more time allotted to having the opportunity to try out a variety of teaching methods, to working individually on issues and problems which teachers initiated or organized, and to field trips.

II. EXPERIENCED TEACHERS' PREFERENCES AND PERCEPTIONS CONCERNING PARTICIPATION IN ORGANIZING SCHOOL DISTRICT-SPONSORED IN-SERVICE ACTIVITIES

This section of the chapter presents findings which are relevant to sub-problem 5. The information was obtained by inviting experienced teachers to rate, on a five-point Likert-type scale, the following five items: defining the goals, setting the objectives, determining the activity focus, determining the mode of delivery, and evaluating the activity, according to their perceptions and preferences.

> Sub-problem 5: What are the perceptions and preferences of experienced teachers as regards their participation in organizing school district-sponsored in-service activities?

Findings: Mean ratings were computed for each response, and then the items ranked in terms of magnitude of means from highest to lowest. Table 6.5 succinctly displays experienced teachers' perceptions and preferences with regard to participating in organizing school district-sponsored in-service activities. The table reveals that in relation to perceptions or views concerning present practice, experienced teachers assigned the highest rating of 3.30 to evaluating the course. Second in rank was defining the goal with a mean of 3.10. Third was setting the objectives with a mean of 3.06. These three means fell between "moderate" and "quite a bit" on the five-point rating scale. The fourth and fifth ranking variables, determining the activity focus, and determining the mode of delivery, were assigned ratings which fell between the "some" and "moderate" response categories. These ratings, respectively, were 2.95 and 2.31.

As may be observed in Table 6.5, there were three variables which received means of 4.10 in terms of preferences. These means which tied in rank for second place, fell between "quite a bit" and "a great deal" on the rating scale were: defining the goals, setting the objectives, and evaluating the activity. Fourth in rank was determining the activity focus which had a mean rating of 4.07 and, like the three tied scores, fell between "quite a bit" and "a great deal". The fifth ranking variable fell between "moderate" and "quite a bit". This variable received a mean rating of 3.58.

Discussion. The perceptions of experienced teachers with regard to their participation in organizing school district-sponsored in-service activities fell into two clusters. One cluster was between "moderate" and "quite a bit" and the other was between "some" and "moderate" on the five-point rating scale.

Experienced teachers' preferences with regard to participating in organizing school district-sponsored in-service activities were in a

Table 6.5

Experienced Teachers' Perceptions and Preferences Concerning Participation in Organizing School District-Sponsored In-Service

		Rating of Respondents' Perceptions and Preferences					
		Real			Ideal		
Category	Item Number	Mean	Std. Dev.	Rank	Mean[1]	Std. Dev.	Rank
Defining the goals.	64	3.10	1.26	2	4.10	0.83	2[3]
Setting the objectives.	65	3.06	1.30	3	4.10	0.82	2[3]
Determining the activity focus.	66	2.95	1.28	4	4.07	0.83	4
Determining the mode of delivery.	67	2.31	1.26	5	3.58	1.06	5
Evaluating the activity.	68	3.30	1.30	1	4.10	0.87	2[3]

[1] denotes real mean (perception).

[2] denotes ideal mean (preference).

[3] denotes tied ranks.

single cluster of four variables with one variable standing alone. The clustering of defining the goals, setting the objectives, evaluating the course, and determining the activity focus were between the "quite a bit" and the "a great deal" response categories. The variable which stood alone was between "moderate" and "quite a bit". This was determining the mode of delivery.

Table 6.5 indicates that there is a gap between what actually occurs and what is preferred by experienced teachers who participate in school district-sponsored in-service activities. Despite indications that teachers are given some opportunity to evaluate activities, define goals, and set objectives, the table also reveals that respondents wish to participate more in organizing in-service programs.

A further indication from the table is that respondents have very little say in determining either the course content or the mode of delivery. One feels that this inhibits full participation. Although goals and objectives might be set by participants, the means are determined by others. Although evaluation is done by participants, the means and mode of delivery are set by others. This approach contravenes the precepts of a humanistic model such as that of Harris and Bessent which presupposes cooperative planning of in-service programs. Perhaps this explains the gap between the actual and the preferred. An inference which may be drawn from the data presented in Table 6.5 is that experienced teachers want to participate quite a bit in organizing school district-sponsored in-service activities.

Results from Further Analyses

Respondents were grouped into nine social categories consisting of twenty-nine groups, and the data were further analyzed in order to obtain additional information concerning possible relationships among selected personal and situational variables and the responses given. One-way analysis of variance was performed where more than one pair of means were involved and *t*-test was utilized to test for differences when only one pair of means was involved. The nine social categories were: age (20-35 years, 36-45 years, and 46-65 years); sex; experience (1-5 years, 6-15 years, 16 years or more); completed years of teacher education (1-2 years, 3 years, 4 or more years); grade levels taught most often (secondary and elementary); major area of teaching concentration (language arts, math-science, social studies, and unspecified); most recent off-campus course (educational administration, educational foundations, arts, educational psychology, and educational curriculum, and instruction); most recent school district in-service (language arts, social studies, special education, and unspecified), and number of off-campus courses taken (1 or 2, 3 or 4, 5 or more).

Findings. The major findings which resulted from analyzing the data further were that respondents agreed on all the preferred mean ratings of the five variables. This is exhibited in Table 6.6. All respondents also agreed on the perceived mean rating of Item 67. There were no significant differences among respondents on the bases of grade levels taught most often, sex, completed years of teacher education, major area of teaching concentration, number and type of off-campus courses taken, and most recent school district-sponsored in-service participated in. Tersely, there was a high degree of consensus among respondents concerning the extent of their participation in organizing school district-sponsored in-service activities. Table 6.6 reveals that significant differences among respondents were based on experience and age, and related to perceptions.

Comparison based on age of respondents. When analyses were done among groups based on experience of respondents significant differences were identified for 6 of the 15 participation variables. Within this social category respondents differed significantly on the perceived ratings of Items 64, 65 and 66. With regard to Item 64 -- defining the goals -- respondents within the 20 to 35 years age group (mean: 2.67)

Table 6.6

Comparison Between Respondents' Characteristics and Perceptions and Preferences with Regard to Participation in Organizing School district-Sponsored In-service Activities

				Ratings of Perceptions	
Independent Variable	Item Number[1]	Group	N	Mean	Standard Deviation
Age	64[2]	20-35	30	2.67 ⌉ [3]	1.21
		36-45	29	3.66 ⌋	1.08
		46-65	18	3.11	1.28
	65[2]	20-35	30	2.63 ⌉ [3]	1.19
		36-45	29	3.59 ⌋	1.02
		46-65	18	3.11	1.28
	66[2]	20-35	30	2.53 ⌉ [3]	1.22
		36-45	30	3.60 ⌋	0.98
		46-65	18	2.83	1.47
Experience	64[2]	1-5 yrs.	13	2.31 ⌉ [3]	1.03
		6-15 yrs.	39	3.23 ⌋	1.20
		16 & over	26	3.23 ⌋	1.24
	66[2]	1-5 yrs.	11	2.08 ⌉ [3]	1.17
		6-15 yrs.	40	3.25 ⌋	1.19
		16 & over	26	3.04 ⌋	1.34
	68[2]	1-5 yrs.	11	2.23 ⌉ [3]	1.01
		6-15 yrs.	41	3.54 ⌋	1.31
		16 & over	26	3.58 ⌋	1.10
Sex		No significant difference between males and females			
Grade Level Taught Most Often		No significant difference between secondary and elementary teachers			
Completed Years of Teacher Education		No significant differences among the three groups			
Major Area of Teaching Concentration		No significant difference among the four groups			
Number of Off-campus Courses Taken		No significant difference among the three groups			
Most Recent Off-campus Course		No significant difference among the five groups			
Most Recent School district-Sponsored In-service Activity		No significant differences among the four groups			

[1] For item description in full, refer to Table 6.5.

[2] denotes "real" mean perceptions.

[3] Square bracket (]) identifies significantly different pairs of means.

differed significantly from those who were in the 36 to 45 years age group (mean: 3.66). Concerning Item 65 (setting the objectives); respondents who were in the 20 to 35 years age group (mean: 2.63) differed significantly from respondents within the 36 to 45 years age group (mean: 3.59). Similarly, for Item 66 (determining the activity focus); the 20 to 35 year old respondents (mean: 2.53) differed significantly from the 36 to 45 year old respondents (mean: 3.60). In all instances where there were significant differences between these two age groups, the younger respondents perceived the participation to be between "some" and "moderate", while older respondents indicated that they participated between "moderate" and "quite a bit" on the five-point rating scale (Table 6.6).

Comparison based on experience of respondents. As is shown in Table 6.6, respondents within the 1 to 5 years experience group differed significantly from the other two experience groups on Items 64, 66 and 68 in terms of perceptions. Respondents with 1 to 5 years of experience perceived defining the goals to be between "some" and "moderate" by assigning this variable a mean rating of 2.31. Respondents within the 6 to 15 years of experience group and those within the 16 years or more experience group both considered this variable to fall between the "moderate" and the "quite a bit" response categories. Thus, they each assigned it a mean rating of 3.23.

With regard to determining the activity focus (Item 66), respondents within the 1 to 5 years experience group (mean: 2.08) placed the level of their participation to be between "some" and "moderate". On the other hand, respondents within the 6 to 15 years of experience group (mean: 3.25) and respondents within the 16 years of experience group (mean: 3.04) considered that the extent of their participation was between "moderate" and "quite a bit" (Table 6.6).

Pertaining to Item 68 (evaluating the activity), respondents who were in the 1 to 5 years experience (mean: 2.23) group estimated the level of their participation as being between "some" and "moderate". Those respondents who were within the 6 to 15 years experience group (mean: 3.54) and within the 16 years or more experience group (mean: 3.58) perceived the level of their participation to be between the "moderate" and "quite a bit" response categories (Table 6.6).

Discussion of further analyses. Further analyses of the data revealed that respondents did not disagree on the preferred mean ratings of the participation variables. This, in consequence, supports a conclusion that all respondents wish to participate quite a bit in organizing school district-sponsored in-service activities. Further analyses of the data revealed that respondents, when grouped according to social categories listed above, support the perceptions of the study sample concerning participating in organizing school district-sponsored in-service activities. As is evident from the report of findings, five analyses of variance tests were performed for each of the independent variables with regard to both perceptions and preferences. Only 6 of the 45 F Ratios were significant for perceptions. These 6 related to 2 independent variables; age and experience. For 7 of the 9 independent variables, no significant differences occurred.

In the comparison of means following a significant F Ratio, at most two pairs of means differed significantly. Thus, of the 180 pairs of means compared for perceptions, only 9 were significantly different, and of the 180 pairs of means compared for preferences, there were no significant differences. Put another way, there was consensus among respondents concerning preferences; and of 180 means compared for perceptions, 171 pairs were not significantly different. These findings lead to a generalization that over all, teachers, regardless of grade levels taught most often, major area of teaching concentration, type and number of off-campus university courses taken, type of school district in-service participated in recently, completed years of teacher education, and sex, agreed, rather than differed concerning the ratings of the variables in terms of the perceived extent to which they, as experienced teachers, participated in organizing school district-sponsored in-service activities. These ratings appeared much the same regardless of the situational and personal background of respondents, or the extent and nature of their participation in school district-sponsored in-service activities.

From further analyses of the data, certain inferences may be drawn. These are: (a) teachers within the 1 to 5 years experience group and those within the 20 to 35 years age group participate minimally in organizing school district-sponsored in-service activities; (b) teachers within the 1 to 5 years experience group and those who fall within the 20 to 35 years age group wish to participate quite a bit in organizing school district-sponsored in-service activities; (c) teachers within the 36 to 45 years age groups participate above average in organizing school district-sponsored in-service activities, and (d) teachers within the 6 to 15 years experience group, and those with more than 16 years of experience are above average participants in organizing school district-sponsored in-service activities.

IV. PERCEIVED EFFECTIVENESS OF SCHOOL DISTRICT-SPONSORED ACTIVITIES IN IMPROVING EXPERIENCE TEACHERS' JOB PERFORMANCE

This section of the chapter pertains to the findings which relate to the school district-sponsored in-service aspects of sub-problem 6. All sub-problems were formulated in Chapter 1 of this dissertation.

In order to obtain the data for this study, fourteen objectives were identified in Figure 2.4 and Figure 2.5 of this dissertation. Respondents were invited to rate each of these objectives on a Likert-type rating scale indicating their perceptions of the extent to which school district-sponsored in-service activities have been effective in meeting these objectives.

> Sub-problem 6: How effective are school district-sponsored in-service activities in contributing to improving the performance of experienced teachers on the job?

Findings. Respondents' ratings of the objectives fell into 4 distinct clusters. One cluster contained the 2 highest ranking objectives (Items 27 and 28) which are associated with versatility. The first ranking objective -- utilizing a variety of teaching techniques within your classroom -- was rated as falling between "moderately effective" and "quite effective", with a mean of 3.54. The second ranking objective which fell within the same range on the five-point rating scale had a mean of 3.47 (Table 6.7).

The second cluster consisted of 4 objectives, namely, acquiring new knowledge in your subject or content area (mean: 3.21); identifying problems associated with the integration of theory with practice (mean: 3.06); identifying problems associated with program changes within your school (mean: 3.04) and identifying problems associated with adapting

Table 6.7

Respondents' Perceptions of the Effectiveness of School-district-Sponsored In-service Activities in Assisting Teachers Meet Specific Objectives

		Percentage Distribution for Each Response Category (N = 92)							Ratings	
Independent Variable	Item Number	1	2	3	4	5	X[1]	Mean	Standard Deviation	Rank
Identifying problems associated with the acquisition of knowledge in subject or content areas.	17	5.4	27.2	29.3	22.8	4.3	8.7	2.93	1.00	11
Acquiring new knowledge in your subject or content areas for use in the classroom.	18	4.3	15.2	31.5	31.5	5.4	8.7	3.21	0.97	3
Identifying problems associated with adapting to work within your school system.	19	8.7	17.4	32.6	25.0	5.4	8.7	3.01	1.01	6
Adapting better to work within your school system.	20	7.6	16.3	35.9	26.1	2.2	8.7	2.99	0.97	7.5[2]
Identifying problems associated with interpersonal competence.	21	13.0	26.1	29.3	13.0	4.3	8.7	2.65	1.08	13
Demonstrating interpersonal competence.	22	10.9	21.7	32.6	13.0	1.1	9.8	2.64	0.97	14
Identifying problems associated with the integration of theory with practice.	23	7.6	19.6	26.1	29.3	5.4	8.7	3.06	1.08	4
Integrating theory with practice in the classroom.	24	9.8	17.4	31.5	22.8	6.5	8.7	2.99	1.10	7.5[2]
Identifying problems associated with implementing program changes within your school.	25	8.7	18.5	27.2	23.9	7.6	8.7	3.04	1.21	5
Implementing program changes within your school.	26	10.9	18.5	32.6	18.5	5.4	8.7	2.87	1.09	12
Identifying problems associated with utilizing a variety of teaching techniques.	27	5.4	12.0	38.0	21.7	9.8	9.8	3.47	1.00	2
Utilizing a variety of teaching techniques within your classroom.	28	3.3	14.1	38.0	22.8	8.7	9.8	3.54	0.97	1
Identifying problems associated with dealing with individual differences among students.	29	8.7	17.4	32.6	20.7	6.5	8.7	2.98	1.08	9.5[2]
Dealing with individual differences among students.	30	12.0	16.3	38.0	14.1	7.6	8.7	2.98	1.11	9.5[2]

[1] Numerals may be interpreted as follows: 5 = Very effective; 4 = Effective; 3 = Moderately effective; 2 = Somewhat effective; 1 = Not effective; X = Cannot answer.

[2] denotes tied ranks.

to work within your school (mean: 3.01). All 4 variables were within the range that fell between "moderate" and "quite a bit" on the five-point rating scale (Table 6.7).

Falling between "some" and "moderate", on the five-point rating scale were the following objectives which were in the third cluster These were: dealing with individual differences (mean: 2.98); identifying problems associated with dealing with individual differences (mean: 2.98); adapting better to work within your school system (mean: 2.99); integrating theory with practice in the classroom (mean: 2.99); and identifying problems associated with the acquisition of knowledge in subject or content areas (mean: 2.93). The clustering of these variables was closer to the "moderately effective" than to the "somewhat effective" response category (Table 6.7).

The fourth cluster of variables fell between "somewhat effective" and "moderately effective". These were: identifying problems associated with interpersonal competence (mean: 2.65); demonstrating interpersonal competence (mean: 2.64), and implementing program changes within your school (mean: 2.87). These variables may be perceived to receive average ratings which fell between "somewhat effective" and "moderately effective".

Discussion. Table 6.7 displays four clusters of objectives. One cluster fell above the mid-point between the "moderately effective" and the "quite effective" response categories. A second cluster fell between "moderately effective" and "quite effective", but below the mid-point between the two response categories. The third cluster fell between the "somewhat effective" and "moderately effective" response categories, but closer to "moderately effective" on the five-point rating scale. The fourth group was slightly above the mid-point between "somewhat effective" and "moderately effective". From the ranking of the variables one may deduce that school district-sponsored in-service activities are more than moderately effective in assisting experienced teachers to meet the objectives which are associated with versatility (Items 27 and 28), and knowledge acquisition in subject or content areas (Item 18). School district-sponsored in-service activities may be perceived as being moderately effective in assisting experienced teachers to meet 12 of the 14 objectives, and somewhat effective in meeting those which are associated with interpersonal competence (Items 21 and 22), and implementing changes in programs within schools (Item 26).

There were two sets of tied ranks among the variables. Adapting better to work within your school system (mean: 2.99), and integrating theory with practice (mean: 2.99) represented one set. The second set included the two objectives which were associated with dealing with individual differences (mean: 2.98). The data are exhibited in Table 6.7. The fact that these objectives are so close to "moderately effective" in ranking, they may be perceived as being in the "moderately effective" response category.

It is somewhat disconcerting that school district-sponsored in-service activities are less than moderately effective in assisting experienced teachers meet the objectives associated with interpersonal competence and implementing program changes.

Results of Further Analyses

Respondents were grouped into nine social categories which included age (20-35 years, 36-45 years, and 46-65 years); sex; experience (1-5 years, 6-15 years, and 16 years or more); completed years of teacher education (1-2 years, 3 years and 4 years or more); major area of teacher education (math-science, social studies, language arts, and unspecified); most recent off-campus course (educational administrations, arts, educational foundations, educational psychology, and educational curriculum and instruction); most recent school district in-service (language arts, social studies, special education, and unspecified); grade levels taught most often (elementary and secondary); and number of off-campus university courses taken (1 or 2, 3 or 4, or 5 or more). These groupings facilitated statistical testing of the data for additional information concerning the relationship between respondents' characteristics and perceptions of the effectiveness of school district-sponsored in-service activities in assisting them meet the 14 in-service education objectives.

Findings. The major findings which emerged from analysing the data further were that respondents, when grouped on the bases of experience, grade levels taught most often, major area of teaching concentration, and most recent school district-sponsored in-service agreed on the ratings assigned the 14 objectives by the study sample. The significant differences which were evident related to only 6 objectives, and these significant differences were on the bases of age, sex, completed years of teacher education, and number and type of most recent off-campus courses taken. Table 6.8 displays the data.

Comparison based on sex of respondents. The analyses done between respondents grouped on the bases of sex, revealed significant differences for one of the 14 objectives. Within this social category respondents significantly differed on Item 19 -- identifying problems associated with

Table 6.8

Respondents' Perceptions of the Relationship Between School district-Sponsored In-service Activities and Effectively Met Objectives

Independent Variable	Item Number	Group	N	Ratings of Perceptions Mean[3]	Standard Deviation
Sex	19	Male	20	2.43 [2]	0.90
		Female	62	2.90	0.90
Age	17	20-35	32	2.75 [2]	0.98
		36-45	31	3.29 [2]	1.01
		46-65	18	2.56	0.86
	19	20-35	32	2.88 [2]	1.07
		36-45	31	3.45 [2]	0.93
		46-65	18	2.61	0.98
	20	20-35	32	2.69 [2]	1.06
		36-45	31	3.35	0.84
		46-65	17	2.94	0.83
	22	20-35	30	2.43 [2]	0.97
		36-45	28	3.04 [2]	0.92
		46-65	14	2.43	0.76
Completed Years of Teacher Education	29	1-2 yrs.	18	2.56 [2]	1.04
		3 yrs.	21	2.81	0.98
		4 & over	46	3.28	1.69
Number of Off-campus University Courses Taken	19	1-2	27	3.26 [2]	1.16
		3-4	26	3.31	1.80
		5 or more	24	2.50	1.02
	20	1-2	27	2.78 [2]	1.09
		3-4	24	3.50 [2]	1.51
		5 or more	25	2.77	1.05
	21	1-2	26	2.70 [2]	1.12
		3-4	33	3.04	0.93
		5 or more	25	2.30	1.06
	25	1-2	25	2.84 [2]	1.07
		3-4	24	2.54	1.14
		5 or more	25	2.80	1.12
Most Recent Off-campus Course	20	Ed. Admin.	15	3.60 [2]	0.91
		Ed. C.I.	10	3.20	0.92
		Ed. Psy.	18	2.33 [2]	1.19
		Arts	28	2.93	0.98
		Ed. Fdns.	8	3.44	0.88
Experience		No significant differences among respondent groups			
Grade Levels Taught Most Often		No significant differences between elementary and secondary teachers			
Major Area of Teaching Concentration		No significant differences among respondent groups			
Most Recent School-district Sponsored In-service		No significant differences among respondent groups			

[1] denotes item number where significant differences occur.

[2] Square bracket (]) denotes significantly different pairs.

[3] Numerals may be interpreted as follows: 1 = not effective; 2 = somewhat effective; 3 = moderately effective; 4 = quite effective; 5 = very effective.

adapting to work within your school system. Male respondents (mean: 2.43) placed this variable between "somewhat effective" and "moderately effective" on the five-point rating scale, as did the female respondents who assigned it a mean rating of 2.90 but female respondents held a more positive view (Table 6.8).

Comparison based on age of respondents. Analyses of the data revealed that respondents grouped on the basis of age differed significantly on 4 of the 14 objectives. These were: identifying problems associated with the acquisition of knowledge in subject or content areas (Item 17), identifying problems associated with adapting to work within your school system (Item 19), adapting better to work within your school system (Item 20), and demonstrating interpersonal competence (Item 22). Table 6.8 exhibits the data.

Both the 20 to 35 year olds, and the 46 to 65 year olds, significantly differed from the 36 to 45 year olds on Items 17, 19 and 22. On Item 17, the mean rating for the 20 to 35 year olds was 2.75. For the 36 to 45 year olds, it was 3.29, and for the 46 to 65 year olds, 2.56. Thus from the 20 to 35 year olds and from the 46 to 65 year olds, this variable received a mean rating which fell between "somewhat effective" and "moderately effective", while for the 36 to 45 year olds, it was rated as being between "moderately effective" and "quite effective" (Table 6.8).

The 20 to 35 year olds (mean: 2.88) and the 46 to 65 year olds (mean: 2.61) assigned a rating which fell between the "somewhat effective" and the "moderately effective" response categories to Item 19. The 36 to 45 year olds (mean: 3.45), on the other hand, rated this variable as falling between the "moderately effective" and the "quite effective" response categories (Table 6.8).

On Item 22 the mean ratings for the 20 to 35 year olds and for the 46 to 65 year olds (2.43) were similar, and fell between the "somewhat effective" and the "moderately effective" response categories. The mean rating assigned this variable by the 36 to 45 year olds, (3.04) was between the "moderately effective" and the "quite effective" response categories (Table 6.8).

With regard to Item 20, the 20 to 35 year olds (mean: 2.69) differed significantly from the 36 to 45 year olds (mean: 3.35). The former age group rated this variable as falling between the "somewhat effective" and "moderately effective" response categories, while the latter age group perceived it to fall between the "moderately effective" and "quite effective" response categories on the five-point rating scale. The data are summarized in Table 6.8.

Comparison based on completed years of teacher education. The significant differences which existed among respondents in this social category, as was revealed by further analyses of the data, pertained to Item 29. Respondents with 1 to 2 years of teacher education (mean: 2.56) significantly differed from respondents with 4 years or more (mean: 3.28). As is shown in Table 6.8, respondents with 1 or 2 years of teacher education perceived this variable to be between "somewhat effective" and "moderately effective", while respondents with 4 or more years of teacher education viewed it as falling between "moderately effective" and "quite effective".

Comparison based on number of off-campus courses taken. When respondents were grouped on the basis of number of off-campus courses taken, and the data analysed, significant differences were found among respondents with regard to Items 19, 20, 21 and 25.

With regard to Item 19, respondents who had taken 1 or 2 off-campus courses (mean: 3.26) were significantly different from respondents who had taken 5 or more courses (mean: 2.50). As is evident in Table 6.8, respondents with 5 or more courses placed this objective as being between "somewhat effective" and "moderately effective", while those who had taken 1 or 2 courses, rated this objective as being between "moderately effective" and "quite effective".

Item 20 was rated as lying between "somewhat effective" and "moderately effective" on the five-point rating scale, by respondents who had taken 1 or 2 courses (mean: 2.78) and by respondents who had taken 5 or more courses (mean: 2.77). Respondents who had taken 3 or 4 courses estimated it to fall between "moderately effective" and "quite effective".

There was one significantly different pair of means with regard to Item 21. Respondents who had taken 3 or 4 courses (mean: 3.04) were significantly different from respondents who had taken 5 or more courses (mean: 2.30). As may be interpreted from the data exhibited in Table 6.8, respondents who had taken 3 or 4 courses estimated this objective to fall between "moderately effective" and "quite effective" on the five-point rating scale, while respondents with 5 or more courses perceived it to fall between "somewhat effective" and "moderately effective".

Pertaining to Item 25, as is exhibited in Table 6.8, respondents who had taken one or two courses (mean: 2.84) differed significantly from those who had taken 3 or 4 courses (mean: 2.54). Similarly, respondents who had taken 3 or 4 courses differed significantly from those who had taken 5 or more courses (mean: 2.80). The three groups of respondents rated this objective as being between the "somewhat effective" and the "moderately effective" response categories, but the mean scores for those who had taken 1 or 2 courses and for those who had taken 5 or more courses were much closer to "moderately effective" than that for respondents who had taken 3 or 4 courses whose score was quite close to the mid-point between the "somewhat effective" and the "moderately effective" response categories.

Comparison based on most recent off-campus course taken. Concerning Item 20, Table 6.8 revealed two significantly different pairs of means. These included means for the educational administration, (mean: 3.60), arts, (mean: 2.93) and educational psychology respondents (mean: 2.33). As is revealed in the table, educational administration respondents rated this objective to fall between "moderately effective" and "quite effective" while arts and educational psychology respondents estimated it to fall between "somewhat effective" and "moderately effective".

Discussion of further analyses. The data shown in Table 6.8 reveal that the significant differences among respondent groups were, for the most part, on Items 19 and 20. These objectives were: identifying problems associated with adapting to work within your school system, and adapting to work within your school system. Further analyses of the data revealed that female respondents, those within the 36 to 45 years age group, and those who have taken 1 or 2, or 3 or 4 off-campus courses viewed school district-sponsored in-service activities to fall between "moderately effective" and "quite effective" in assisting them to identify problems which relate to adapting better to work within their school system (Item 19).

It is safe for one to assume that respondents within the 36 to 45 years age group, those with 3 or 4 off-campus university courses, those who had recently taken educational administration courses considered school district-sponsored in-services to be more than "moderately effective" in assisting them to adapt to work within their school systems. It is also safe to infer that female respondents, those within the 46 to 65 years age group, respondents with 5 or more off-campus courses and respondents who recently took arts and educational psychology do not perceive school district-sponsored in-service to be "moderately effective" in helping them to identify problems which are associated with adaptation to work.

Further analyses of the data revealed that there was a high degree of consensus among respondents with regard to the mean ratings assigned the 14 objectives. Respondents all agreed on the mean ratings assigned 7 of these objectives, and the significant differences which occurred served to support the level of agreement rather than to isolate disagreement. As is evident from the report of findings, two *t*-tests and 12 analyses of variance tests were employed, where applicable, for the 14 objectives. Only 10 of the 98 F Ratios and 2 of the 28 *t*-tests were significant. For 4 of the 9 independent variables, no significant differences occurred.

In the comparison of means following the F Ratio, at most 2 pairs of means differed significantly. Thus, of the 504 pairs of means compared, only 18 were significantly different. Interpreted in another manner, 486 of the 504 pairs of means compared were not significantly different. These findings lead to a generalization that teachers, on the whole, irrespective of personal and situational circumstances, or the nature or extent of their participation in school district-sponsored in-service activities, held the same view with regard to the effectiveness of school district-sponsored in-service activities in assisting them to meet the 14 objectives outlined in the conceptual framework of this dissertation.

The extent to which school district-sponsored in-service activities are effective in assisting experienced teachers to meet the 14 objectives, may be perceived as the extent to which these activities assist in improving the performance of such teachers on the job. According to the data, school district-sponsored in-service activities are "moderately effective" in assisting experienced teachers to meet the 14 objectives, and may therefore be perceived as being "moderately effective" in improving the job performance of such teachers.

SUMMARY OF CHAPTER 6

This chapter was devoted to the presentation, the findings which relate to sub-problems 3 through 6. Only the aspects which refer to school district-sponsored in-service activities were reported herein.

Sub-problem 3 was concerned with the extent to which 8 instructional activities utilized in school district-sponsored in-service activities lend themselves to meeting the 14 in-service objectives outlined in Chapter 2 of this dissertation. The conclusion which emerged was that respondents perceived listening to lectures or watching demonstrations; working in groups, and discussing topics and issues as the most effective instructional activities. These activities fell between "moderate" and "great" on a five-point rating scale. Fourth, fifth, sixth, seventh, and eighth were, working individually on issues and problems initiated or organized by teacher-participants, engaging in role playing or simulated activities, having an opportunity to try out a variety of teaching techniques, receiving instruction through self-teaching, printed or audio-visual materials; and field trips. Further analyses of the data supported this conclusion.

Sub-problem 4 was concerned with experienced teachers' perceptions and preferences with regard to time allotted to the 8 instructional activities utilized in school district-sponsored in-services. The conclusion was that experienced teachers wish more time allotted to all instructional activities excluding listening to lectures and watching demonstrations. The discrepancy score which represented the difference between perceptions and preferences indicated that there was a gap between current practice and respondents' preferences. Further analyses of the data served to support the conclusion that experienced teachers wish to have more time allotted to 7 of the 8 instructional activities and less time to listening to lectures and watching demonstrations.

For sub-problem 5, respondents were invited to indicate their perceptions and preferences with regard to participating in organizing in-service education activities sponsored by school districts. The information was obtained from mean ratings assigned 6 variables by respondents. The conclusion which arose, was, that experienced teachers wish to participate quite a bit in organizing school district-sponsored in-service activities. The data seemed to indicate that respondents, within the 20 to 35 years of age group and who had 1 to 5 years of experience perceived themselves to participate minimally in organizing in-service education sponsored by school districts, but want to participate "quite a bit". The data also seemed to indicate that teachers with 6 years or more of experience and within the 36 to 45 years age group participate moderately, but wish to do so "quite a bit". This seemed equally true for respondents within the 46 to 65 years age group.

The inference drawn from the findings of sub-problem 6 was that school district-sponsored in-service activities are moderately effective in assisting experienced teachers to meet the 14 in-service objectives. Hence, as a context of in-service education, school districts contribute moderately to improving the job performance of experienced teachers.

Experienced teachers have indicated that they are helped most in meeting the following objectives through participating in school district-sponsored in-service activities: versatility, acquiring new knowledge in their subject or content areas, identifying problems associated with the integration of theory with practice, identifying problems associated with program changes within their schools, and identifying problems associated with adapting to work within their school systems. These 6 objectives, in terms of mean ratings, clustered between "moderately effective" and "quite effective". The remaining 8 objectives formed a cluster between "somewhat effective" and "moderately effective" and were between .01 and .4 less than "moderately effective". The 8 objectives in this cluster were adapting better to work within your school system, integrating theory with practice, identifying problems associated with dealing with individual differences, dealing with individual differences, identifying problems associated with the acquisition of knowledge in subject or content areas, implementing program changes within their schools, identifying problems associated with interpersonal competence, and demonstrating interpersonal competence.

It is surprising that teachers have not been assisted more in the area of interpersonal competence. It is also surprising that teachers perceived themselves as being helped as much in meeting the objective which was associated with knowledge acquisition.

CHAPTER 7

DISCUSSION OF RESULTS AND RELATIONSHIP TO PREVIOUS STUDIES

This study was designed to determine the effectiveness of off-campus university courses and school district-sponsored in-service activities in meeting the expectations which experienced teachers hold for them. The central purpose of the study was to identify the preferences of experienced teachers with regard to the ideals of in-service education and their perceptions concerning the in-service education goals of off-campus university courses and school district-sponsored in-service activities. In addition, an attempt was made to identify the perceptions and preferences of experienced teachers with regard to instructional practice and teacher participation in organizing off-campus university courses and school district-sponsored in-service activities.

The present chapter presents an overview of the study, a summary of results and conclusions arising from the investigation. Implications for the planning of in-service teacher education, implications for educational administration, and implications for further research are also included.

I. OVERVIEW OF THE STUDY

Theoretical Framework for the Study

A modified version of the Harris-Bessent (1969) model (Figure 2.3) was adopted as the conceptual framework for the study (Figure 2.4), and the frame of reference was the most recent off-campus university course, and the most recent school district-sponsored in-service activity in which respondents participated. It was thought that this model would accommodate a multidimensional approach which would allow for the consideration of means, process and outcome of the in-service program. In addition, it was thought that it would facilitate investigation of the optimization of goals and shed light on the role played by participants in organizing in-service programs.

Instrumentation

The instruments employed in this exploratory and descriptive study were: (a) a questionnaire and (b) an interview guide. The questionnaire consisted of two parts. The first part of the Likert-type questionnaire collected demographic data, while the second collected data which related to respondents' perceptions and preferences as they pertain to off-campus university courses and school district-sponsored in-service activities. All responses were rated on a five-point rating scale. Five was the highest response category, and one was the lowest. Free-choice or open-ended questions were provided in order to give respondents an opportunity to express their perceptions and preferences freely. This questionnaire, which took respondents an average of 20 minutes to complete, is in part, an adapted version of a GIL student questionnaire which was developed for the study of teacher education in Canada.

The interview guide consisted of 14 questions. Five of these pertained to demographic data. The remaining questions sought respondents' perceptions concerning the strengths and weaknesses of off-campus university courses and school district-sponsored in-service activities. The researcher utilized this guide to conduct telephone interviews with 10 subjects.

Pilot Study

The questionnaire. The main instrument used to collect data for the study underwent 3 pilot tests prior to data collection. The first pilot study was conducted in July, 1979. In this instance, the instrument was scrutinized by 5 experienced teachers who were participants in an off-campus university summer course. As a result of this test, the instrument was restructured. A second pilot study was conducted in September, 1979. Ten educators, 5 of whom were practising teachers, scrutinized the instrument for appropriateness, clarity, and adequacy. Resulting from this scrutiny, the instrument was revised and submitted to another group of 10 experienced teachers who were invited to complete the instrument and record the time taken to do so. They were also invited to make suggestions with regard to revision of the instrument. At the conclusion of the third test, the instrument was deemed suitable for data collection. The data for this study were collected between January and March, 1980.

The interview guide. The interview guide was pilot tested in September, 1979. Then, 5 experienced teachers were interviewed. All interviewees suggested revision of this guide. This was done, and the guide was used to collect data for the present study in March, 1980.

The Study Sample

One hundred twenty experienced teachers who were randomly selected from 5 off-campus university centres, comprised the study sample. Of these teachers, 22 were male and 70 female. All respondents were within the age range of 26 to 65 years. Approximately 55 percent had completed at least one degree, and 49 percent had less than 16 years of teaching experience. Almost 53 percent taught in the elementary grades, and elementary education majors represented the largest specialist group. Approximately 72 percent of respondents had taken off-campus university courses within the last 2 years, and all respondents had recently participated in at least 2 hours of school district-sponsored in-service.

Data Collection Procedures

As indicated above, two data collection procedures were used in this study -- a questionnaire and telephone interviews. The return of questionnaires amounted to 85 percent. All questionnaires were returned by the cut-off date and were examined for written comments and for lack of response to certain questions. Based on the findings of this examination, 10 interviewees, 2 from each of the 5 centres, were selected.

The questionnaire focused on questions which were relevant to the components of the Harris-Bessent model, and the interviews sought to determine weaknesses and strengths of off-campus university courses and school district-sponsored in-service activities. Respondents were asked to cite reasons for strengths and weaknesses of these two contexts of continuing education, and to suggest possible means of rectifying the perceived weaknesses during interviews which lasted for an average of 15 minutes. Interviewees elaborated on their perceived and preferred role in organizing off-campus university courses and school district-sponsored in-service activities. Respondents were invited to use the most recent off-campus university courses and most recent school district-sponsored in-service activity in which they had participated as their frame of reference, when answering the questions in the questionnaire, and those posed in interviews. By and large, the interviews served only to substantiate comments made on the questionnaire. The nature of the interviews might have influenced the collection of additional data.

Statistical Treatment of Data

A five-point Likert-type rating scale was used to rate the groups of responses which were compared by employing means, and percentages. Parametric tests in the form of one-way analysis of variance and *t*-distributions were also utilized in order to determine relationships, if any, of selected independent variables to the overall findings. The nine independent variables were: sex, age, experience, major area of teaching concentration, grade levels taught most often, completed years of teacher education, most recent school district-sponsored in-service, most recent off-campus course taken, and number of off-campus courses taken.

II. SUMMARY OF RESULTS

The results of this investigation are summarized on the basis of sub-problems because each sub-problem deals with a particular aspect of the study. In several instances the results which relate to off-campus university courses and those which pertain to school district-sponsored in-service activities are reported separately.

Sub-problem 1: How important are the ideals of in-service teacher education?

Respondents were invited to rate 7 ideals in terms of perceived importance. To produce teachers who can deal effectively with individual differences among students, to produce teachers who can be versatile in utilizing a variety of teaching techniques, and to produce teachers who can integrate theory with practice were rated as the 3 top ranking ideals. Preference for the 2 ideals last mentioned confirmed the findings of Cane (1969), Stewart (1966), Schreiber (1975), Zigarmi and associates (1977), Edmonton Public School Board (1978), and Yarger and Brannigan (1979). Ranking fourth, fifth, sixth, and seventh respectively were: to produce teachers who can adapt to work within existing school systems, to produce teachers who can be competent in interpersonal relationships; to produce teachers who can be knowledgeable in subject or content areas, and to produce teachers who can be change implementors.

When respondents were classified on the basis of social categories or according to the 9 independent variables, few significant differences among respondents were observed. Respondents within the 20 to 35 years age group were significantly different from respondents within the 36 to 45 years age group concerning the ideals, to produce teachers who can adapt to work within existing school systems, and to produce teachers who can be competent in interpersonal relationships. With regard to the adaptation ideal, the 36 to 45 year olds viewed it as being between "great" and "very great" in importance while the 20 to 35 year olds perceived it as being between "moderate" and "great" in importance. Concerning the ideal related to producing teachers who can be competent in interpersonal relationships, the 20 to 35 year olds as well as the 36 to 45 year olds viewed it as falling between "moderate" and "great" in importance, but the older group held a more positive view.

Significant differences also existed between respondents who had taken 1 or 2 off-campus university courses and those who had taken 3 or

4 courses. This difference was concerned with the ideal which was associated with producing teachers who can integrate theory with practice. Though both groups perceived this ideal to fall between "great" and "very great" in importance, respondents who had taken 3 or 4 courses felt more strongly on the matter. The findings revealed that experienced teachers, regardless of personal situation, and the extent and nature of in-service experience, viewed the ideals of in-service education in much the same way. For instance, of 252 possible pairs of means, only 6 pairs were significantly different, and these differences pertained to only 3 of the 7 ideals of in-service education.

Sub-problem 2: How important are the real goals of off-campus university courses and school district-sponsored in-service teacher education activities?

Off-campus university courses. When average ratings of the 7 goals of off-campus university courses were rank ordered, 5 fell between "moderate" and "great" and 2 fell between "some" and "moderate" on the five-point rating scale. None of the goals was perceived to fall between "little or none" and "some" which were the lower ratings on the five-point scale. In descending order of importance, experienced teachers perceived the goals thus: to make teachers more knowledgeable in subject or content areas, to assist teachers who will be able to use various teaching techniques, to increase the interpersonal skills of teachers, to increase the ability of teachers to integrate theory with practice, to assist teachers to deal effectively with individual differences among students, to make teachers more adaptable to work within existing school systems, and to assist teachers to develop the necessary skills to implement change. Two goals tied in rank for fourth place. These were :

to assist teachers to deal effectively with individual differences and to increase the ability of teachers to integrate theory with practice.

There were few significant differences among respondents in their perceptions of the goals of off-campus university courses when they were classified according to the 9 independent variables. With regard to the goal which was concerned with making teachers more knowledgeable in subject or content areas, the 46 to 65 years age group felt that this was a goal of "great" importance in terms of what was occurring in their off-campus university courses. This view differed from that of the 20 to 35 age group respondents who perceived it to fall between "moderate" and "great" in importance on the five-point rating scale. Respondents who had completed 4 years of teacher education differed significantly in their perception of this goal when compared with respondents with less than 4 years of teacher education. Respondents with 1 to 2 years of teacher education and respondents with 4 years of teacher education perceived the importance placed on this goal by off-campus university courses to range between "moderate" and "great", but those with 4 years of teacher education held a stronger view. In their perception of the importance of this goal, respondents who had completed 3 years of teacher education considered it as "moderately" important.

With regard to the goal which was concerned with making teachers more adaptable to work within existing school systems, mathematics-science majors and respondents who had not specified their major area of teaching concentration differed significantly from language arts and social studies majors in their perceptions of its importance. While language arts and social studies majors perceived it to fall between "some" and "moderate", mathematics-science majors and those who had not specified their major area of teaching concentration rated it as falling between the "moderate" and "great" response categories.

Respondents with 3 years of teacher education rated this goal as being between "some" and "moderate" in importance. Conversely, respondents with 1 or 2 years of teacher education and 4 years of teacher education from whom they were significantly different, rated the goal as falling between "moderate" and "great" in importance.

Based on the number of off-campus university courses taken, respondents who had taken 1 or 2 courses differed significiantly from respondents who had taken 5 or more courses in their perception of the goal which was associated with assisting teachers to deal effectively with individual dofferences among students. Respondents who had taken 1 or 2 courses rated this goal as falling between "moderate" and "great" in importance while respondents who had taken 5 or more courses perceived it to fall between "some" and "moderate" in importance.

Apart from the significant differences among 5 of the possible 252 pairs of means, respondents were in agreement with the ratings of the goals of off-campus university courses in terms of importance. It is therefore, safe to assume that respondents, regardless of personal situation, extent and nature of in-service experience, viewed the importance of the goals of off-campus university courses in much the same way.

School district-sponsored in-service activities. When average ratings of the 7 goals of school district-sponsored in-service activities were rank ordered, 6 fell between "moderate" and "great" in importance, and one fell between "some" and "moderate" in importance. The perceived importance of the goals in descending order was: to assist teachers who will be able to use a variety of teaching techniques, within their schools, to make teachers more adaptable to work within existing school systems, to increase the ability of teachers to integrate theory with practice, to make teachers more knowledgeable in content or subject areas, to assist teachers to deal effectively with individual differences among students, to increase the interpersonal skills of teachers, and to assist teachers to develop the necessary skills to implement change within schools. The first two goals tied in rank for first place.

When respondents were classified according to the 9 independent variables of age, sex, experience, major area of teaching concentration, grade levels taught most often, completed years of teacher education, number of off-campus courses taken, most recent off-campus course, and most recent school district-sponsored in-service activity, few significant differences among respondents were observed. The significant differences which were observed related to the goals that were concerned with assisting teachers to deal effectively with individual differences among students, assisting teachers who will be able to use a variety of teaching techniques, increasing the ability of teachers to integrate theory with practice, and to make teachers more adaptable to work within existing school systems. There were no significant differences among respondents on the importance of the remaining 3 goals.

With regard to the goal which was associated with assisting teachers to deal effectively with individual differences among students, only one pair of means was significantly different. Respondents who had taken 1 or 2 off-campus university courses held a more positive view concerning the importance placed on this goal than respondents who had taken 5 or more courses. Concerning the importance of the goal to assist teachers who will be able to use various teaching techniques, 2 pairs of means were significantly different. Respondents with 1 to 5 years of teaching experience differed significantly from the other 2 groups within this social category. The perceived importance of this goal to the 1 to 5 years experience group was that it fell between "some" and "moderate". The other experience groups perceived this goal to be between "moderate" and "great" in importance.

With regard to the goals concerning making teachers more adaptable to work within existing school systems, and increasing the ability of teachers to integrate theory with practice, respondents who had taken 3 or 4 off-campus university courses perceived both goals to be of great importance in school district-sponsored in-service activities. This view was not strongly supported by respondents who had taken 5 or more off-campus university courses. Of a possible 252 pairs of means compared, only 5 pairs were significantly different with regard to respondents' perceptions of the importance placed on 4 of the 7 in-service education goals of school district-sponsored in-service activities. This serves to support a conclusion that there was a high degree of agreement among respondents with regard to the importance of the 7 goals of school district-sponsored in-service activities.

Sub-problem 3: To what extent do the instructional activities utilized in school district-sponsored in-service activities and off-campus university courses lend themselves to meeting the objectives of in-service education?

Off-campus university courses. When average ratings of the 8 instructional activities utilized in off-campus university courses were rank ordered, one of these activities fell between the "moderate" and "great" response categories. Six fell between the "some" and "moderate" response categories, and one fell between the "little or none" and "some" response categories. Apart from discussing topics and issues, which received the highest mean rating, and field trips, which ranked lowest, the activities seemed to cluster in pairs. For instance, working in groups, and listening to lectures and watching demonstrations which ranked second and third respectively, were between .01 and .02 less than "moderate" on the five-point rating scale. The fourth and fifth ranking activities, receiving instruction through self-teaching, printed or audio-visual materials; and working individually on issues and problems organized by teacher-participants, were .14 and .13 respectively above the mid-point between the "some" and the "moderate" response rates. The sixth and seventh ranking activities, having an opportunity to try out a variety of teaching methods, and engaging in role playing or simulated activities, received ratings that were well below the mid-point between the "some" and the "moderate" response categories.

There were few significant differences among respondents when they were classified on the bases of the independent variables or social categories such as age, sex, experience, completed years of teacher education, grade levels taught most often, major area of teaching concentration, most recent school district-sponsored in-service, most recent off-campus courses taken, and number of off-campus university courses taken. The significant differences were based on discussing topics and issues, and on role playing. The findings indicated that significant differences were among respondents grouped on the bases of sex, most recent off-campus course taken, and major area of teaching concentration. There were no significant differences within the other social categories, and the data indicated that respondents all agreed on the ratings assigned 6 of the 8 instructional activities.

Male respondents felt more strongly than female respondents, that discussing topics and issues fell between the "moderate" and "great" response categories in terms of effectiveness or extent to which it lends itself to meeting off-campus university course objectives. Similarly, male respondents felt more positively than female respondents that engaging in role playing or other simulated activities lends itself to between "some" and "moderate" in extent in meeting off-campus university course objectives.

Based on most recent off-campus university courses taken, educational administration respondents significantly differed from those who had taken arts, in their perceptions relating to engaging in role playing and other simulated activities. Both groups of respondents rated this variable as falling between the "some" and the "moderate" response categories on the five-point rating scale, but the educational administration respondents viewed it as closer to "moderate". While educational administration respondents viewed the extent to which this activity lends itself to meeting off-campus course objectives as being between the "some" and the "moderate" response categories, those who had taken educational psychology perceived it to be between "little or none" and "some" in extent. Respondents who had taken educational curriculum and instruction perceived the extent to which engaging in role playing and other simulated activities meet the objectives of off-campus university courses to be "little or none" on the five-point rating scale. Educational foundations and educational administration respondents were similar in their perceptions.

When respondents were grouped on the basis of major area of teaching concentration there were significant differences among respondents who had taken language arts and those who had taken either mathematics-science or who had not specified their major area of teaching concentration. Language arts respondents perceived the extent to which engaging in role playing or other simulated activities lends itself to meeting off-campus course instructional objectives to range between "little or none" and "some". Mathematics-science majors and those who had not specified their major area of teaching concentration perceived it to fall between "some" and "moderate" on the five-point rating scale. These 6 significantly different pairs of means from a possible 288 pairs serve to support a conclusion that there was a high degree of agreement among respondents in their perception of the extent to which the 8 instructional activities utilized in off-campus university courses lend themselves to meeting the objectives of in-service education.

School district-sponsored in-service activities. Average ratings of the 8 instructional activities utilized in school district-sponsored in-service, when rank ordered, revealed that the 3 top ranking activities, listening to lectures and watching demonstrations, discussing topics and issues, and working in groups, fell between "moderate" and "great" on the five-point rating scale. The remaining 5 instructional activities fell between the "some" and the "moderate" response categories on the same rating scale. These 5 activities in descending order according to rank were: working individually on issues and problems initiated or organized by teacher-participants; engaging in role playing or other simulated activities; having an opportunity to try out a variety of teaching techniques, receiving instruction through self-teaching, printed or audio-visual materials; and field trips.

When respondents were classified according to the independent variables or social categories, namely, sex, age, experience, grade levels taught most often, major area of teaching concentration, completed years of teacher education, most recent school district-sponsored in-service, most recent off-campus university course, and number of off-campus university courses taken, significant differences were observed among certain respondent groups with regard to Items 32, 33, 35, and 38. The significant differences were based on age, major area of teaching concentration, experience, most recent off-campus courses taken, and most recent school district-sponsored in-service.

Grouped on the basis of age, respondents within the 20 to 35 years age group were significantly different from those within the 36 to 45 years age group concerning the extent to which working in groups lends itself to meeting school district-sponsored in-service objectives. The older age group rated this activity as being between "moderate" and "great" in terms of the extent to which it lends itself to meeting the objectives associated with school district-sponsored in-service, while the younger age group rated it between "some" and "moderate" on the five-point rating scale.

Grouped on the basis of major area of teaching concentration respondents differed significantly concerning the extent to which having an opportunity to try out a variety of teaching techniques, and working in groups lend themselves to meeting school district-sponsored in-service objectives. The data indicated that language arts majors rated working in groups as falling between the "some" and "moderate" response categories, while mathematics-science majors perceived it to fall between "moderate" and "great" on the five-point rating scale. With regard to the extent to which having an opportunity to try out a variety of teaching techniques lends itself to meeting school district-sponsored in-service objectives, language arts majors significantly differed from respondents who had not specified their area of teaching concentration, and mathematics-science majors. Whereas language arts majors rated this activity as falling between "some" and "moderate" on the five-point rating scale as did the mathematics-science majors, the latter group of respondents held a more positive view concerning this activity. On the other hand, language arts majors held a more positive view concerning the extent to which this activity lends itself to meeting school district-sponsored in-service objectives when compared with respondents who had not specified their major area of teaching concentration.

Among respondent groups based on most recent off-campus university courses taken, there were significant differences among respondents concerning the extent to which discussing topics and issues, working in groups, working individually on issues and problems initiated or organized by teacher-participants, and engaging in role playing or other simulated activities. Respondents who had recently taken educational psychology rated this activity, discussing topics and issues, as falling between "moderate" and "great". Those who had recently taken educational foundations rated it as being "moderate" on the five-point rating scale. Educational administration respondents had a more positive view concerning the extent to which engaging in role playing and other simulated activities lends itself to meeting school district-sponsored in-service objectives when compared with respondents who had taken educational psychology. Educational foundations respondents also differed significantly in perceptions from those who had taken educational psychology with regard to the extent to which engaging in role playing or other simulated activities lends itself to meeting the objectives of school district-sponsored in-service activities. The data revealed that educational psychology respondents rated this method of instruction as being between "little or none" and "some" in extent, while educational administration respondents rated it as falling between "some" and "moderate" but closer to "moderate". Educational foundations respondents perceived this instructional method as being "moderate" in extent.

According to the findings, it appears that engaging in role playing and other simulation activities was not perceived by educational psychology respondents as being "great" in meeting school district-sponsored in-service objectives. This view was opposed to that of educational administration and educational foundations respondents.

When respondents were grouped on the basis of experience, respondents with 1 to 5 years of experience differed significantly from those with 16 years or more of experience in their views pertaining to working in groups. The data revealed that respondents with 1 to 5 years of experience rated this activity as being between "some" and "moderate" in extent, while the 16 years or more experience group rated it as being between "moderate" and "great" in extent.

Grouped on the basis of most recent school district-sponsored in-service participation, respondents who had participated in language arts, who differed significantly from those who took special education, rated working individually on issues and problems initiated by teacher-participants as falling between the "moderate" and "great" response categories. On the other hand, respondents who had participated in special education workshops, rated this activity as falling between "some" and "moderate" in extent to which it assists them to meet school district-sponsored in-service objectives.

The significant differences which existed among groups of respondents within the 9 social categories served to strengthen a conclusion that respondents, irrespective of their association with school district-sponsored in-services in terms of participation or experience, were in agreement concerning the extent to which instructional activities utilized in school district-sponsored in-services lend themselves to meeting the in-service program objectives. Of a possible 288 pairs of means, only 11 were significantly different, and these differences concerned only 5 of the 8 activities.

Sub-problem 4: What are the perceptions and preferences of experienced teachers with regard to time allotted to off-campus university courses and school district-sponsored in-service activities?

Off-campus university courses. Rank ordering of the average ratings of the 8 instructional activities utilized in off-campus university courses in terms of time allotment revealed that respondents perceived the time allotted to listening to lectures and watching demonstrations to be between "quite a bit" and a "great deal". Next in rank was discussing topics and issues which received a rating ranging between "moderate" and "quite a bit" on the five-point rating scale. The remaining 6 activities in terms of perceived allotted time were arranged in two clusters. Working in groups, receiving instruction through self-teaching, audio-visual or self-teaching materials, and working individually on issues and problems initiated or organized by teacher-participants, were between "some" and "moderate" on the five-point rating scale. On the other hand, having an opportunity to try out a variety of teaching techniques, field trips, and engaging in role playing or other simulated activities, clustered between "little or none" and "some" on the same scale. Respondents agreed on the mean ratings of the 8 instructional activities in terms of perceived time allotment. In brief, of 288 pairs of means compared, there were not significant differences.

Among the respondent groups based on the 9 independent variables, significant differences in preferences were evident only within the age group category. The activity on which they disagreed was field trips. While respondents within the 46 to 65 years age group preferred a time allotment ranging between "moderate" and "quite a bit" to this activity, both the 20 to 35 years age group and the 36 to 45 years age group preferred a time allotment of between "some" and "moderate". The significant differences among respondent groups serve to support a conclusion that there was a high degree of agreement among 8 of the 9 social categories with regard to preferred time allotted to 7 of the 8 instructional activities utilized in off-campus university courses. Concerning the instructional activity -- field trips -- on which they differed, there were only 2 significantly different pairs of means. In brief, of a possible 288 pairs of means compared for preferences, 286 pairs were not significantly different.

With regard to preferred time allotment to the 8 instructional activities, respondents indicated that they wished to have time ranging between "moderate" and "quite a bit" to 6 instructional activities.

These were: listening to lectures and watching demonstrations, discussing topics and issues, working in groups, having an opportunity to try out a variety of teaching methods, working individually on issues and problems which are initiated or organized by teachers, and receiving instruction through self-teaching audio-visual or printed materials. Respondents wanted between "some" and "moderate" time allotted to field trips and engaging in role playing or other simulated activities, the two remaining instructional activities.

The discrepancy between preferred and perceived time allotted to instructional activities utilized in off-campus university courses was greatest on having an opportunity to try out a variety of teaching methods, field trips, and working individually on issues and problems which teachers initiated or organized. The findings also indicated that respondents wished to have less time devoted to listening to lectures and watching demonstrations. In addition, with regard to preferred time allotment to the remaining 7 instructional activities, respondents were in full agreement. This finding serves to substantiate those of Boschee and Hein (1980), Larson (1962), and Zigarmi and associates (1977) that teachers wish to have more time allotted to in-service education programs.

School district-sponsored in-service activity. When average ratings of the 8 instructional activities were rank ordered in terms of perceived allotted time, working in groups which received the highest rating fell between the "moderate" and the "quite a bit" response categories. This variable was .02 on the five-point rating scale, less than "quite a bit". Seven of the 8 instructional activities fell within two clusters. Ranging between "some" and "moderate" were:

discussing topics and issues, working in groups, and receiving instruction through audio-visual and self-teaching materials. The remaining 4 activities clustered between "little or none" and "some" on the five-point rating scale. These were: having an opportunity to try out a variety of teaching methods, working individually on issues and problems which teachers initiated or organized, field trips, and engaging in role playing or other simulated activities.

Rank ordering of preferred average ratings of time allotted to the 8 instructional activities revealed that respondents wished to have between "moderate" and "quite a bit" of time allotted to 6 instructional activities. These were: listening to lectures and watching demonstrations, discussing topics and issues, working in groups, having an opportunity to try out a variety of teaching methods, working individually on issues and problems which teachers initiated or organized, and receiving instruction through self-teaching, audio-visual and printed materials. Respondents' preference for field trips and engaging in role playing and other simulated activities was that these should be allotted time ranging between "some" and "moderate" on the five-point rating scale. The findings indicated that respondents wanted less time devoted to listening to lectures and watching demonstrations. The discrepancy scores indicated that respondents wanted more time allotted to having an opportunity to try out a variety of teaching techniques, more time allotted to working individually on issues and problems which teachers initiated or organized, and to field trips, than to the other activities.

Grouping of respondents on the bases of social categories or according to the 9 independent variables revealed that there were significant differences among respondents within certain groups, in terms of perceived and preferred time allotted to certain instructional activities.

Respondents grouped on the basis of sex differed in perceptions with regard to time allotted to having an opportunity to try out a variety of teaching methods, and on time allotted to field trips. While female respondents considered that "quite a bit" of time was allotted to the former, male respondents thought otherwise. Female respondents felt that a moderate amount of time was allotted to the latter. Male respondents' perception was that the time allotted to this activity was within the range of between "some" and "moderate".

Within the social category based on age, respondents within the 20 to 35 years age group differed significantly from those within the 36 to 45 years age group in their preference for time allotted to working in groups. The 36 to 45 year old respondents displayed preferences for time allotment ranging between "moderate" and "quite a bit" to be devoted to this activity. The 20 to 35 year olds, on the other hand, displayed preference for time allotment ranging between "some" and "moderate".

Respondents grouped on the basis of years of teaching experience differed significantly in their preference with regard to time allotted to having an opportunity to try out a variety of teaching methods, and receiving instruction through audio-visual, printed to self-teaching materials. Respondents within the 3 groups in this social category indicated a preferred time allotment which fell between "moderate" and "quite a bit". However, the 1 to 5 years experience group was more positive in preference than was the 16 years and over experience group.

With regard to the latter activity, respondents with 1 to 5 years of experience indicated a preferred time allotment ranging between "little or none" and "some". Conversely, the 6 to 15 years and 16 years or more experience groups indicated a time allotment preference which ranged between "some" and "moderate".

Respondents grouped on the basis of grade levels taught most often differed significantly in their preference concerning time allotted to having an opportunity to try out a variety of teaching methods and to field trips. Elementary teachers indicated a time allotment preference ranging between "some" and "moderate" to having an opportunity to try out a variety of teaching methods. The preference indicated by secondary teachers ranged between "little or none" and "some".

The preferred time allotment for field trips indicated by both groups fell between "little or none" and "some". However, elementary teachers showed a greater preference for more time to be allotted to this activity, when compared with their secondary counterparts.

Respondents grouped on the basis of most recent school district-sponsored in-service participation differed significantly in their preference for time allotted to listening to lectures and watching demonstrations, and for working in groups. Within this social category, language arts participants indicated a preferred time allotment which fell between "moderate" and "quite a bit" to listening to lectures and watching demonstrations. Mathematics-science participants indicated a time allotment preference falling between "some" and "moderate" on the five-point rating scale to the same activity. With regard to preferred time allotted to working in groups, special education respondents indicated a preference which fell between "little or none" and "some". On the other hand, mathematics-science participants' preference ranged between "moderate" and "quite a bit".

Grouped on the basis of major area of teaching concentration, language arts specialists differed significantly from respondents who had not specified their major area of teaching concentration, in terms of preferred time allotted to listening to lectures and watching demonstrations. While language arts respondents indicated a preferred time allotment ranging between "moderate" and "quite a bit", respondents who had not indicated their major area of teaching concentration indicated a preference for a time allotment which fell between "some" and "moderate", to this activity.

The significant differences among respondent groups serve to illustrate that respondents were in agreement with the perceived time allotted to 6 instructional activities. Differences in terms of perceived time allotted to field trips and having an opportunity to try out a variety of teaching methods existed only between the groups based on sex. Groups based on the remaining 8 independent variables were in full agreement with the perceived time allotted to the 8 instructional activities. It is, consequently, safe to assert that the 2 significantly different pairs of means of a possible 288 pairs, reveal a high degree of consensus existed among respondents with regard to perceived time allotted to the 8 instructional activities.

Concerning preferred time allotted to the 8 instructional activities, there were 10 significantly different pairs of means. Two pairs significantly differed on time allotted to listening to lectures and watching demonstrations. Two pairs significantly differed on time allotted to working in groups. Three pairs were significantly different with regard to time allotted to having an opportunity to try out a variety of teaching techniques. Two pairs were significantly different with regard to time allotted to field trips, and one pair differed significantly concerning time allotted to receiving instruction through audio-visual, printed, or self-teaching material. Of a possible 288 pairs of means, only these 10 pairs were significantly different in preference concerning time allotted to various instructional activities. This finding serves, therefore, to support an inference that experienced teachers, regardless of their personal situation, their level of participation, and the nature of their experience in school district-sponsored in-service activities, held a similar view with regard to preferred time allotted to the 8 instructional activities.

sub-problem 5: What are the perceptions and preferences of experienced teachers as regards participating in organizing school district-sponsored in-service activities and off-campus university courses?

Off-campus university courses. Average ratings of 5 participation variables indicated experienced teachers' perceptions with regard to participating in organizing off-campus university courses. Experienced teachers' views were that they participated between "some" and "moderate" in evaluating the course. This was the first ranking participation variable. Second in rank was setting the objectives which fell between "little or none" and "some". Next, were defining the goals and determining the mode of delivery which tied in rank for third place, and fifth was determining the course content.

The preferred mean ratings revealed that experienced teachers wish to participate between "moderately" and "quite a bit" in all aspects of organizing off-campus university courses. However, defining the goals, determining the course content, and determining the mode of delivery were tied in rank. The desire to have greater input in organizing in-service programs by respondents in this study sample has confirmed findings reported by Zigarmi and associates (1977), Larson (1962), Schreiber (1975), and Yarger and Brannigan (1979).

When respondents were grouped according to the 9 independent variables, namely, sex, age, experience, major area of teaching concentration, grade levels taught most often, most recent school district-sponsored in-service, number of off-campus courses taken, completed years of teacher education, and most recent off-campus university course, few significant differences among respondents were observed. They related to respondents' perceptions concerning 3 variables. The significant differences existed on the bases of age and sex. There were no significant differences among respondents when grouped according to the remaining 7 independent variables in terms of perceptions, and there were no significant differences among respondents with regard to preferences concerning their participation in organizing off-campus university courses.

Grouped on the basis of age, respondents within the 20 to 35 years age group differed significantly from respondents within the 36 to 45 years age group, concerning perceptions relating to defining the goals. While the 20 to 35 year olds rated the level of their participation as falling between "little or none" and "some" on the five-point rating scale, the 36 to 45 year olds felt that they had had "some" participation in defining the goals of off-campus university courses.

Respondents within the 36 to 45 years age group and those within the 46 to 65 years age group significantly differed in perceptions concerning participation in setting the mode of delivery. The mean scores indicated that the 46 to 65 year olds perceived themselves as participating between "little or none" and "some" in setting the mode of delivery, while the 36 to 45 year olds felt that they had "some" participation in this aspect of organizing off-campus university courses.

Significant differences based on sex, revealed that male and female respondents perceived themselves as participating between "little or none" and "some" in defining the goals. However, female respondents had participated more than males. Both males and females perceived themselves as participating between "little or none" and "some" in setting off-campus course objectives but the level of female participation was closer to "some" on the five-point rating scale.

The significant differences among respondent groups serve to strengthen a conclusion that overall respondents wish to participate between "moderate" and "quite a bit" in organizing off-campus university courses. In addition, of a possible 180 pairs of means compared, only 4 pairs were significantly different. Thus one may assume that experienced teachers, despite their experience, personal situation and the nature of their involvement in in-service education, held similar perceptions and preferences as regards participation in organizing off-campus university courses.

School district-sponsored in-service activities. Mean ratings of the 5 participation variables revealed that respondents participated equally in evaluating the activity, defining the goals, and setting the objectives of school district-sponsored in-service activities. The level of their participation was between "moderate" and "quite a bit" on the five-point rating scale. Respondents also participated in determining the activity focus and the mode of delivery between "some" and "moderate" in extent.

With regard to respondents' preferences in terms of participation, they wished to participate in defining the goals, setting the objectives, evaluating the activity, and determining the activity focus, between "quite a bit" and "a great deal" on the five-point rating scale. Though they want to participate more in determining the mode of delivery, their preference is that the extent of this aspect of participation be kept between "moderate" and "quite a bit". The mean scores for preferences compared with those for perceptions, indicated that a gap existed between the actual and the desired. This was especially noticeable where determining the activity focus was rated between "some" and "moderate" for perceived, and between "quite a bit" and " a great deal" for preferred.

Few significant differences were observed among respondents who were grouped into social categories dictated by the 9 independent variables of age, sex, experience, completed years of teacher education, grade levels taught most often, major area of teaching concentration, most recent school district-sponsored in-service, number of off-campus courses taken, and most recent off-campus course taken. The observed significant differences pertained to respondents' prefefences. There was consensus among respondents in their perceptions concerning the level of participation in organizing school district-sponsored in-service activities. There were no dissenting groups with regard to preferred participation in determining the mode of delivery.

Two groups of respondents, based on age, differed significantly in preferences as regards, defining the goals (Item 64), setting the objectives (Item 65), and determining the activity focus (Item 66).

Within the social category based on experience, the 1 to 5 years experience group differed significantly from the other groups concerning the preferred level of participation in: defining the goals (Item 64), determining the activity focus (Item 66), and evaluating the course (Item 68).

Respondents within the 20 to 35 years age group rated defining the goals as being between "some" and "moderate" in preference. The 36 to 45 year olds from whom the 20 to 35 year olds significantly differed, preferred to participate between "moderate" and "quite a bit". With regard to setting the objectives, the 20 to 35 year olds preferred between "some" and "moderate" participation. The 36 to 45 year olds, from whom they significantly differed, wished to participate between "moderate" and "quite a bit". The 20 to 35 year old respondents preferred between "some" and "moderate" participation in determining the activity focus, while the 36 to 45 year olds wished to participate between "moderate" and "quite a bit". Thus, were they significantly different.

Based on experience, respondents within the 1 to 5 years group, wished to participate between "some" and "moderate" in defining the goals. The other two experience groups differed significantly. They wished to participate between "moderate" and "quite a bit". The preferred level of participation for determining the activity focus and evaluating the course, was between "some" and "moderate" for the 1 to 5 years experience group, and between "moderate" and "quite a bit" for those within the other two experience groups. The significant differences between the 1 to 5 years experience group, and the 6 to 15, and over 16 years experience group indicated that the more experienced teachers wished to participate more in evaluating school district-sponsored in-service activities.

Of a possible 180 pairs of ideal means compared, only 9 were significantly different. This gives support to the conclusion that experienced teachers, regardless of the level of their participation, the nature of their in-service education experience, or their personal situation wish to participate more in organizing school district-sponsored in-service activities. These differences have also supported an inference that participants within 1 to 5 years of experience, and who fall within the 20 to 35 years age group want some participation in organizing school district-sponsored in-service activities but the extent of their preferred participation does not equal that of older or more experienced respondents.

Sub-problem 6: How effective are off-campus university courses and school district-sponsored in-service activities in improving the performance of experienced teachers on the job?

Off-campus university courses. Average ratings of the 14 objectives illustrated that experienced teachers perceived off-campus university courses to range between "moderately effective" and "quite effective" in assisting them to meet the 2 objectives associated with knowledge, and the objective associated with utilizing a variety of teaching techniques within their classrooms. Apart from the 2 objectives which were associated with change implementation, and the one associated with adapting better to work within their school systems which were below the mid-point between "somewhat effective" and "moderately effective" on the five-point rating scale, the remaining 8 objectives clustered between "somewhat effective" and "moderately effective" and well above the mid-point between these two response categories.

Grouping of respondents according to the 9 independent variables into the social categories of sex, age, experience, grade levels taught most often, major area of teaching concentration, most recent off-campus university courses, most recent school district-sponsored in-service, number of off-campus courses taken and completed years of teacher education, revealed significant differences based only on sex and on most recent off-campus courses taken. These differences pertained to 7 objectives. The findings revealed that respondents were in full agreement with the perceptions of the study sample concerning the objectives associated with knowledge; interpersonal competence; and those objectives which related to adapting better to work within their school system; identifying problems associated with the integration of theory with practice; and that associated with implementing program changes within their schools.

As a group, male and female respondents differed significantly in their perceptions of the effectiveness of off-campus university courses in assisting them to meet the objectives which pertained to identifying problems associated with adapting to work within their school systems, and identifying problems associated with implementing program changes within their school. Male respondents perceived the effectiveness of off-campus university courses in assisting them to meet the former objective to range between "moderately effective" and "quite effective". Female respondents, on the other hand, felt that off-campus university courses ranged between "somewhat effective" and "moderately effective" in assisting them to meet this objective. Concerning the effectiveness of off-campus university courses in assisting them to meet the latter objective within their schools, male and female respondents perceived it to be between "somewhat effective" and "moderately effective", but males had a more positive view.

Grouped on the basis of most recent off-campus course, respondents differed significantly in their perceptions of the effectiveness of off-campus university courses in assisting them to meet 6 objectives. The first of these was identifying problems associated with adapting to work within their school systems. Educational administration respondents differed significantly from arts and educational psychology respondents in their perceptions of the effectiveness of off-campus university courses in assisting them to meet this objective. Educational administration respondents rated off-campus university courses as being between "moderately effective" and "quite effective". Arts respondents felt that off-campus university courses were between "not effective" and "somewhat" effective", while educational psychology respondents rated off-campus university courses as falling between "somewhat effective" and "moderately effective" in assisting them meet this adaptation objective.

Next was the objective associated with integrating theory with practice in the classroom. With regard to respondents' perceptions of the effectiveness of off-campus university courses in assisting them to meet this objective, educational administration respondents differed significantly from those who had taken educational psychology, and educational curriculum and instruction. Similarly, arts respondents differed significantly from educational psychology, and educational curriculum and instruction. The data revealed that educational administration and arts respondents perceived off-campus university courses to range between "somewhat effective" and "moderately effective" in assisting them to meet this objective. On the other hand, educational psychology and educational curriculum and instruction respondents viewed off-campus university courses to range between "moderately effective" and "quite effective" in assisting them to meet this objective.

The third objective on which respondents grouped on the basis of most recent off-campus course taken, differed significantly, was that which pertained to identifying problems associated with program change within their schools. The data revealed that educational administration respondents were significantly different from arts respondents and thus rated off-campus university courses as "moderately effective" in assisting them to meet this objective. Arts respondents rated off-campus university courses as being between "not effective" and "somewhat effective".

Fourth was the objective pertaining to identifying problems associated with utilizing a variety of teaching techniques. Derived from the data, the indications were that educational curriculum and instruction respondents differed significantly from arts and educational administration respondents in their perceptions of the effectiveness of off-campus university courses in assisting them to meet this objective. Similarly, educational psychology respondents differed significantly from arts and educational administration respondents. Educational curriculum and instruction and educational psychology respondents rated off-campus university courses as being between "moderately effective" and "quite effective" in assisting them to meet this versatility objective. Arts and educational administration respondents' rating fell between "somewhat effective" and "moderately effective".

The objective associated with utilizing a variety of teaching techniques within your classroom was the next on which respondents within the social category of recent off-campus course taken, differed significantly. Educational administration respondents who rated off-campus university courses as being between "not effective" and "somewhat effective" in assisting them to meet this objective, differed significantly from educational curriculum and instruction respondents who rated the assistance received from off-campus university courses as being between "moderately effective" and "quite effective".

Identifying problems associated with dealing with individual differences among students, and dealing with individual differences among students were the final two objectives on which respondents grouped on the basis of most recent off-campus course taken significantly differed. Educational administration respondents who rated off-campus university courses as "somewhat effective" in assisting them to meet the first mentioned objective, differed significantly from educational psychology and educational curriculum and instruction respondents who perceived off-campus university courses to range between "moderately effective" and "quite effective" in this regard. With regard to the second mentioned objective, educational administration respondents differed significantly from educational curriculum and instruction and educational psychology respondents in their perception of the effectiveness of off-campus university courses in assisting them to meet this objective. While educational administration respondents rated off-campus university courses as falling between "not effective" and "somewhat effective" in assisting them to meet this objective, the view of educational curriculum and instruction and of educational psychology respondents was that off-campus university courses ranged between "moderately effective" and "quite effective" in assisting them to meet the objective associated with dealing with individual differences among students.

Overall, the significant differences which existed among respondents within the two social categories of sex and most recent off-campus university course taken, serve to support a conclusion that respondents grouped on the bases of grade levels taught most often; age; experience; completed years of teacher education; most recent school district-sponsored in-service activity; number of off-campus courses taken; and major area of teaching concentration upheld the views of the study sample concerning the perceived effectiveness of off-campus university courses in assisting them meet the 14 objectives. In addition there was consensus among respondents concerning 7 of the 14 objectives, and respondents grouped on the basis of sex differed significantly on only 2 objectives.

School-district-sponsored in-service activities. Average ratings of the 14 objectives revealed that respondents in this study perceived school district-sponsored in-service activities to range between "moderately effective" and "quite effective" in assisting them to meet the objectives associated with identifying problems in utilizing a variety of teaching techniques, and in utilizing a variety of techniques within their classrooms. These were the 2 top ranking objectives. Next in rank were the following 4 objectives which clustered below the mid-point which fell between "moderately effective" and "quite effective". These objectives in descending order were: acquiring new knowledge in your subject or content areas for use within your classroom, identifying problems associated with the integration of theory with practice, identifying problems associated with program changes within your school, and identifying problems associated with adapting to work within your school system.

Another clustering of 6 objectives ranging in descending order were: adapting better to work within your school system, and integrating theory with practice within your classroom which tied in rank. These were followed by identifying problems associated with dealing with individual differences among students, and dealing with individual differences among students, which also tied in rank. Next were identifying problems associated with the acquisition of knowledge in subject or content areas, and implementing program changes within your school. These objectives clustered slightly below "moderately effective" on the five-point rating scale.

The final 2 objectives clustered slightly above the mid-point between "somewhat effective" and "moderately effective". There were: identifying problems associated with interpersonal competence, and demonstrating interpersonal competence.

Grouping of respondents into social categories based on the 9 independent variables of age, sex, experience, major area of teaching concentration, grade levels taught most often, completed years of teacher education, number of off-campus courses taken, most recent off-campus university course and most recent school district-sponsored in-service revealed that respondents agreed on the bases of grade levels taught most often and major area of teaching concentration on the perceived effectiveness of school district-sponsored in-service in assisting them to meet the 14 objectives.

Male and female respondents differed significantly only on the rating of school district-sponsored in-service activities in assisting them meet the objective associated with identifying problems associated with adapting to work within their school systems. Male respondents' perception of the effectiveness of school district-sponsored in-service activities was that they fell between "moderately effective" and "quite effective". Female respondents' view was that school district-sponsored in-service activities ranged between "somewhat effective" and "moderately effective" in assisting them to meet this adaptation objective. There were no other significant differences within this social category.

When respondents were grouped on the basis of age there were significant differences among the three age groups on the objectives associated with identifying problems associated with the acquisition of knowledge in subject or content areas for use within the classroom; identifying problems associated with adaptation to work within the school system; adapting better to work within their school system; and demonstrating interpersonal competence. With regard to meeting the first-mentioned objective, the 20 to 35 year olds and the 46 to 65 year olds indicated that they perceived school district-sponsored in-service to be between "somewhat effective" and "moderately effective" in assisting them. Thus, these age groups differed significantly from the 36 to 45 year olds who perceived school district-sponsored in-service to be between "moderately effective" and "quite effective" in assisting them to meet this objective.

Similarly, for the second-mentioned objective, the rating of the middle age group of school district-sponsored in-service activities fell between "moderately effective" and "quite effective". The other two age groups perceived school district-sponsored in-service activities to be between "somewhat effective" and "moderately effective" in assisting them to meet this adaptation objective.

With regard to the effectiveness of school district-sponsored in-service activities in assisting experienced teachers to meet the objectives: adapting better to work within their school system, and demonstrating interpersonal competence, the 20 to 35 year olds differed significantly from the 36 to 45 year olds. The younger age group rated school district-sponsored in-service activities as being between "somewhat effective" and "moderately effective" in assisting them to meet both objectives. For the 36 to 45 year olds, school district-sponsored in-service activities were between "moderately effective" and "quite effective" in providing assistance to them. Apart from significant differences concerning these 4 objectives, respondents grouped on the basis of age were not divided in their perceptions of school district-sponsored in-service activities in assisting them to meet the remaining 10 objectives. The objectives on which they significantly differed were those associated with identifying problems associated with adaptation to work within their school systems; adapting better to work within their school systems; identifying problems associated with interpersonal competence; and identifying problems associated with implementing program changes within their schools.

Respondents who had taken 2 to 4 off-campus courses rated school district-sponsored in-service activities as being between "moderately effective" and "quite effective" in assisting them to identify problems associated with adapting to work within their school systems. This group of respondents differed significantly from respondents who had taken 5 or more courses, who rated school district-sponsored in-service activities as being between "somewhat effective" and "moderately effective" on this variable. On the variable which related to adapting better to work within their school systems, respondents who had taken 1 or 2 courses, or 5 or more rated school district-sponsored in-service activities as being between "somewhat effective" and "moderately effective". Respondents who had taken 3 or 4 courses were significantly different in their perceptions of school district-sponsored in-service activities in assisting them to meet this objective. Their view was that school district-sponsored in-service activities were between "moderately effective" and "quite effective" in this regard.

The views of respondents who had taken 1 or 2 courses, or 5 or more, concerning the effectiveness of school district-sponsored in-service activities in assisting them to identify problems associated with program changes within their schools were significantly different from those who had taken 3 or 4 courses. Respondents who had taken 3 or 4 courses were less positive in their views concerning the effectiveness of school district-sponsored in-service activities in assisting them to meet this objective.

When respondents were grouped on the basis of most recent off-campus courses taken respondents who had taken educational psychology and arts differed significantly from respondents who had taken educational administration. Respondents who had taken arts and educational psychology perceived school district-sponsored in-service activities to be between "somewhat effective" and "moderately effective" in assisting them to adapt better to work within their school systems. On the other hand, educational administration respondents perceived school district-sponsored in-service activities to be between "moderately effective" and "quite effective" in assisting them to adapt better to work within their school systems.

The findings with regard to significant differences among respondents concerning the effectiveness of school district-sponsored in-service activities in assisting them to meet the 14 objectives were few in number. Of 504 possible pairs of means, only 15 pairs were significantly different, and these significant differences pertained primarily to the 2 adaptation objectives. It is safe to assert, therefore, that experienced teachers, on the whole, were in agreement in their perceptions concerning the effectiveness of school district-sponsored in-service activities in assisting them to meet the 14 objectives.

III. CONCLUSION

In Chapter 1, six sub-problems were formulated as being relevant to the in-service model used as the analytical framework of this study. The answers to the sub-problems represent the major conclusions of the investigation. Based on the findings, the following conclusions relating to the six sub-problems were reached:

Sub-problem 1: Ideals of In-Service Education

1. Experienced teachers view the 7 ideals of in-service education to be of great importance. However, they prefer to have emphasis placed on producing teachers who can be versatile in using a variety of teaching methods; on producing teachers who can deal with individual differences among students; and on producing teachers who can integrate theory with practice.
2. Experienced teachers within the 36 to 45 years age group view the ideal which is associated with producing teachers who can be competent in interpersonal relationships, to be of great

importance, as opposed to respondents within the 20 to 35 years age group.

3. Experienced teachers within the 36 to 45 years age group consider the ideal which pertains to producing teachers who can adapt to work within their school system to be of great importance.
4. Experienced teachers who have taken 3 or 4 off-campus university courses consider the ideal associated with producing teachers who can integrate theory with practice to be of great importance.
5. Experienced teachers, when grouped on the bases of experience, sex, grade levels taught most often, major area of teaching concentration, completed years of teacher education and most recent school district in-service participation, perceive the seven ideals of in-service education to be of great importance.
6. The ideals, producing teachers who are knowledgeable in subject or content areas, and producing teachers who can implement change within their schools, are not perceived to be of great importance to experienced teachers.

Sub-problem 2: Goals of In-service Education -- Off-campus University Courses

1. Off-campus university courses are perceived by experienced teachers to be placing greatest emphasis on making teachers more knowledgeable in subject or content areas. Next in emphasis in descending order are: to assist teachers who will be able to use a variety of teaching techniques, to increase the interpersonal competence of teachers, and to assist

teachers to deal with individual differences.

2. Teachers within the 46 to 65 years age group and those with 4 years of teacher education perceive emphasis on making teachers more knowledgeable in subject or content area as being an important goal of off-campus university courses.
3. Experienced teachers with 3 years of teacher education do not perceive off-campus university courses to stress making teachers more adaptable to work within existing school systems. Language arts majors hold a similar view.
4. Experienced teachers who majored in mathematics-science perceive that a goal of off-campus university courses is to stress assisting teachers to adapt to work within existing school systems.
5. Experienced teachers who took 1 or 2 off-campus university courses perceive emphasizing assisting teachers to deal effectively with individual differences among students as an important goal of off-campus university courses.
6. Experienced teachers who had taken five or more off-campus university courses do not perceive assisting teachers to deal effectively with individual differences among students as an important goal of off-campus university courses.

School district-sponsored in-service activities

1. Experienced teachers with 6 to 15 years of experience perceive an important goal of school district-sponsored in-service activities is to place emphasis on assisting teachers who can be able to use various teaching techniques within their classrooms.
2. Experienced teachers who have taken 2 or 3 off-campus university

courses perceive emphasis on increasing the ability of teachers to integrate theory with practice, and to make teachers more adaptable to work within their school systems as important goals of school district-sponsored in-service activities.

Sub-problem 3: Off-Campus University Courses

1. Experienced teachers perceive discussing topics and issues, working in groups, and listening to lectures and watching demonstrations as instructional activities utilized in off-campus university courses which lend themselves most to meeting in-service education objectives.
2. Field trips, and engaging in role playing and other simulated activities are perceived to lend themselves least to meeting in-service education objectives.
3. Male respondents, mathematics-science majors, and experienced teachers who took educational administration in off-campus courses recently, perceive role playing and engaging in other simulated activities as instructional activities which lend themselves to a great extent to meeting in-service education objectives.

School district-sponsored in-service activities

1. Experienced teachers perceive working in groups as the instructional activity which lends itself most to meeting school district-sponsored in-service education objectives. Ranking next are listening to lectures and watching demonstrations, and discussing topics and issues.
2. Respondents within the 36 to 45 years age group perceive working in groups, and engaging in role playing and other

simulated activities as instructional activities which lend themselves to a great extent to meeting in-service education objectives. Role playing and engaging in other simulated activities are similarly endorsed by experienced teachers who take courses in educational foundations and educational administration.

3. Mathematics-science and language arts majors perceive having an opportunity to try a variety of teaching techniques to lend itself to a great extent to meeting school district-sponsored in-service objectives.
4. Language arts majors strongly endorse working individually on issues and problems initiated by teacher participants, as an instructional activity which lends itself a great extent to meeting school district-sponsored in-service objectives. This view is opposed by special education specialists.

Sub-problem 4: Time Allotted to Instructional Activities

Off-campus university courses

1. Experienced teachers wish more time devoted to all instructional activities excluding listening to lectures and watching demonstrations.
2. Experienced teachers wish to have less time devoted to listening to lectures and watching demonstrations.
3. Experienced teachers within the 46 to 65 age group wish to have more time devoted to field trips.
4. Experienced teachers want a great deal of time allotted to having an opportunity to try out a variety of teaching

methods, to working on issues and problems initiated by teacher-participants, and to field trips.

5. Off-campus university courses need to be restructured in terms of time allotted to the various instructional activities.

School district-sponsored in-service activities

1. Experienced teachers wish to have less time allotted to listening to lectures and watching demonstrations, and more time allotted to the other instructional activities.
2. Experienced teachers with 16 years or more of experience and those who teach elementary grades wish to have more time allotted to trying out a variety of teaching methods.
3. Experienced teachers who are language arts majors wish to have more time allotted to listening to lectures and watching demonstrations.
4. Experienced teachers within the 1 to 5 years of experience group wish to have less time devoted to receiving instruction through self-teaching, printed or audio-visual materials.
5. Experienced teachers' desire for more time allotted to group work, and to discussing topics and issues suggests their need for peer interaction, a desire for seminars and a desire for small group approach to in-service education.

Sub-problem 5: Teacher Participation in Organizing In-service Programs

Off-campus university courses

1. Experienced teachers wish to participate between "moderate" and "quite a bit" in organizing off-campus university courses. This is opposed to their present minimal participation.
2. Female teachers participate more than males in organizing off-

campus university courses.

3. Experienced teachers within the 36 to 45 years age group participate more than those within the 20 to 35 years age group, in defining the goals of off-campus university courses.
4. Experienced teachers within the 36 to 45 years age group participate more than the other age groups in determining the mode of delivery employed in off-campus university courses.

School district-sponsored in-service activities

1. All experienced teachers within this study sample agreed that the degree of their participation in organizing school district-sponsored in-service activities was negligible. As a group, they wish to participate between "quite a bit" and "a great deal".
2. Experienced teachers with 1 to 5 years of experience, and who fall within the age group of 20 to 35 years wish to have only "some" participation in organizing school district-sponsored in-service activities.
3. Respondents with over 6 years of teaching experience and who are over 36 years of age want to participate between "moderate" and "quite a bit" in organizing school district-sponsored in-service activities.

Sub-problem 6: Effectiveness of In-Service Programs

Off-campus university courses

1. Off-campus university courses are between "moderately effective" and "quite effective" in assisting experienced

teachers to meet the 14 in-service objectives within their schools.

2. Male experienced teachers are assisted moderately to meet the objectives associated with adapting to work within their school systems and in implementing program changes within their schools through participating in off-campus university courses.
3. Educational administration respondents are best assisted to meet the adaptation objectives as a result of their participation in off-campus university courses.
4. Educational psychology and educational curriculum and instruction, unlike arts and educational administration respondents, are best helped to meet the objectives associated with the integration of theory with practice through participation in off-campus university courses.
5. When compared with educational psychology and educational curriculum and instruction respondents, educational administration respondents who participate in off-campus university courses receive little help to meet the objective which is associated with identifying problems associated with dealing with individual differences among students.

School district-sponsored in-service activities

1. Participation in school district-sponsored in-service activities assists male experienced teachers to meet the objectives associated with adaptation. Other groups of experienced teachers who are assisted to meet

the adaptation objectives include experienced teachers within the 36 to 45 years age group, those with 6 to 15 years of teaching experience, experienced teachers who have taken 3 to 4 off-campus university courses, and respondents who have taken educational administration recently.

2. Female experienced teachers, respondents with 5 or more off-campus university courses, educational psychology, and arts respondents were assisted least, through participation in school district-sponsored in-service activities, to meet the adaptation objectives.
3. Experienced teachers within the 36 to 45 years age group and those who have taken 3 or 4 off-campus university courses are assisted through participation in school district-sponsored in-service activities to meet the objectives that are associated with interpersonal competence.
4. Participation in school district-sponsored in-service activities assists teachers with 4 or more years of teacher education to meet the objective pertaining to identifying problems associated with dealing with individual differences among students.
5. Participation in school district-sponsored in-service activities assists experienced teachers within the 36 to 45 years age group to meet the objective which pertains to identifying problems associated with the acquisition of

knowledge in subject or content areas more than it assists those within the 20 to 35 years and 46 to 65 years age groups.

6. Participation in school district-sponsored in-service activities assists experienced teachers to meet the objectives which pertain to: utilizing a variety of teaching techniques within their classrooms, identifying problems associated with utilizing a variety of teaching techniques within their classrooms, acquiring new knowledge in their subject or content areas, relating theory to practice within their classrooms, and in implementing program changes within their schools.

IV. IMPLICATIONS OF THE STUDY

The purpose of this part of the Chapter is to examine and discuss the implications of the present study for research, for theory, for the practice of in-service teacher education, and for the practice of educational administration.

Theoretical and Research Implications

Answers to the question, "How effective are off-campus university courses and school district-sponsored in-service activities in fulfilling the in-service expectations of experienced teachers?" were obtained by identifying experienced teachers' perceptions and preferences concerning the ideals, goals, and instructional practices of both contexts of in-service education. As previously stated, the attempt to investigate the perceptions and preferences of experienced teachers with regard to off-campus university courses and school district-sponsored in-service activities as two contexts of continuing teacher education was not previously undertaken. In addition, the adapted model and adapted questionnaire, used in the present study, may have potential for replicating the study.

Practical Implications: In-Service Teacher Education

One of the main findings of this study has been that experienced teachers display preference for in-service education programs which assist them in dealing with individual differences among students. The implication of this finding is that experienced teachers desire to have in-service programs which focus on individualized instruction. Such programs would, ideally, free the teacher to monitor individual students' progress, and allow the teacher to prepare appropriate programs for individual students.

A second finding was that experienced teachers display preference for in-service programs which assist them to utilize a variety of teaching techniques, and to relate theory to practice. Both preferences imply that experienced teachers ought to have in-service education which focuses on the practical rather than on the theoretical. The workshop approach, and teaching methods demonstration which aim at improving the technical skills of teachers could prove successful in this regard.

A third finding of the study was that experienced teachers display little preference for in-service programs which stress knowledge in content or subject areas or which accentuate adapting to work within their school systems. One implication is that school district-sponsored in-service activities and off-campus university courses should de-emphasize these aspects of in-service education which seem not to be meeting the expectations of experienced teachers.

A fourth finding in this study was that experienced teachers display preference for instructional activities which focus on working in groups, discussing topics and issues, and giving them an opportunity to try out a variety of teaching techniques. These findings would appear to encourage such procedures as seminars, workshops, teachers' centres, and the small group approach. While consideration might be given to the use of these approaches to meet the bulk of teachers, the preferences of sub-groups ought not to be by-passed. For example, the findings revealed that experienced teachers within the 46 to 65 years age group display preference for field trips. Language arts majors prefer listening to lectures and watching demonstrations, and working on issues and problems organized or initiated by teacher-participants. Those who attended classes in educational foundations or in educational administration expressed preference for role playing and other simulated activities. This is not a preference for language arts majors or educational psychology students. While discussing topics and issues might be an effective instructional activity for classes in educational administration, the converse is true for classes in educational foundations. For mathematics-science majors, group work is preferred as an instructional activity, but this does not appear to be the case for special education workshop participants. It would seem desirable that the preferences be used as guides in the design of programs for the above-mentioned sub-groups of experienced teachers.

Thought might also be given to designing in-service programs around specified objectives in order to assist certain sub-groups of experienced teachers. For example, female teachers, those not within the 36 to 45 years age group, and those who have not taken educational administration, need to be assisted to adapt better to work within their school systems. Experienced teachers who take courses in arts and educational administration need to be assisted to: (a) integrate theory with practice, and (b) deal with individual differences among their students. This may be achieved if these teachers are given more courses in the areas of educational psychology and educational curriculum and instruction. The findings have revealed that educational curriculum and instruction respondents and those who have taken educational psychology are assisted to a great extent, to meet the objectives mentioned above.

An additional finding is that experienced teachers within the 36 to 45 years age group participated quite a bit in organizing in-service programs. This may not be true for other sub-groups within the sample who displayed a preference for participating between quite a bit and a great deal in organizing in-service programs. The implications would seem to be that it is desirable to involve the 20 to 35 years age group and the 46 to 65 years age group, more than at present, in organizing in-service programs.

One major finding of the study is that there is a gap between experienced teachers' perceptions (what is), and their preferences (what ought to be), as regards in-service programs. It would appear that this finding has implications for the practice of educational administration.

Practical Implications: Educational Administration

A gap was evident between teachers' perceptions and preferences as regards time allotted to instructional activities utilized in in-service programs. There was also a discrepancy between the ideals and the goals of in-service education. Research evidence cited by Osborne and Bowling (1977) seems to support the latter finding. If these discrepancies are to be reduced, teacher-participation in organizing in-service programs ought to be enlisted. Finlay (1978) found that participation in in-service programs increases the level of motivation of the involved participant.

The participation of teachers in organizing in-service programs might also serve to avert the duplication of in-service offerings and services which was found to exist between off-campus university courses and school district-sponsored in-service activities, in some aspects of the present study. It may be possible for the university and school districts to cooperate in planning in-service programs for experienced teachers. What is suggested here, is that a collegial approach be adopted.

There are several avenues to collegiality. The use of committees or teams, teachers' centres, and the adoption method are feasible procedures. These are explained later in this chapter.

Committees or teams could aid in the provision of information necessary for planning functional in-service programs. Committee membership could also foster professional growth for involved participants. They could provide motivation for teacher-participants, who ought to be included as members, and who could give expression to authentic in-service needs. While committees could serve to uphold school district-university linkages, they could also aid teacher-participant members to elicit useful in-service information, from their peers, more easily. Westbury (1975) endorses the involvement of teachers at this level in planning in-service programs.

Advantages to be derived from the use of teams or committees are: they are small in size, they are less rigid in structure, and they facilitate lateral rather than vertical communication. Because they are time-linked and are intended to focus on the resolution of a single problem, they foster the group goal of unanimity. Benveniste (1972: 154) noted that a small team is less vulnerable to attack.

It might be suggested that the convenor of the committee be from the school district. Then, such a person would be closer to the source of information. It must be borne in mind that members who can talk frankly to teachers, who can identify with them, and who can obtain their confidence are most essential in this regard. Hence, it would be necessary for team members to be competent in interpersonal relationships, possess some knowledge in the area of change implementation, and be committed to the cause of education. The committee or team approach which is suggested, could create an atmosphere for the mutual sharing of expertise by the university and the school district. Based on the findings of this study, it would seem that individual universities and the school-districts should not, on their own, plan in-service education for teachers. It is therefore suggested that they ensure that other agencies which are concerned with teacher education be involved. These include the Alberta Department of Education, the Alberta Teachers' Association and the Alberta School Trustees' Association. This approach would ensure that input is obtained from the five contexts of in-service education as are described by Joyce, Howey and Yarger (1976). Furthermore, the exchange of ideas implied in this approach could prove beneficial to all involved.

Teachers' centres could facilitate close links between the university, school districts and the other agencies involved in teacher education. Such institutions would initially include schools, the Faculty of Education, the Department of Education, administrative groups and the teachers' association. Such a professional network would enable teachers to have access to a wide range of experience and expertise and could represent what Kahn (1972) has described as "a fulcrum synthesizing teacher education". Further, this could aid in eliminating the outdated concept of what Faure (1972) has described as the hierarchy of institutions. As linking agencies, teachers' centres which are designed to reflect changing needs of teachers, could promote better in-service education for experienced teachers.

Teachers' centres could help the inductee teacher -- a teacher within the first five years of experience -- avoid pitfalls and make satisfactory adjustment to the new role as a teacher. Teachers' centres could help the inductee teacher grow in the ability to deal with changing circumstances. They could assist the inductee teacher to develop and evaluate instructional materials which relate to his particular circumstances. Teachers' centres could assist the inductee teacher to establish a pattern for professional performance which accents scholarship, research, and teaching. They may be viewed as places which enhance the role of the teacher as a professional, in juxtaposition with providing an atmosphere for teachers to find answers to questions which relate to their professional tasks. While teachers' centres represent neutral meeting places for all who are concerned with the quality of education, they assure relevance in programs of activity which are related to classroom work.

All educators have a positive responsibility to provide quality education for the youngsters in the schools. Teachers' centres could assist in this direction.

Through the adoption procedure, a university may provide extensive services for schools such as serving as a resource centre. This is a feasible step toward the in-service education for experienced teachers. The major objectives of this approach are to utilize the services of university educators, administrators, and experienced teachers in school improvement programs, and to cater to a school improvement program on the basis of need. A program of this description is functional in parts of India (UNESCO, 1976:84).

The adoption method helps teachers and administrators to design and evaluate their programs, and allows the professor to provide assistance in the teacher's own classroom. This adoption method is time-linked, and endures for three or four years. Within this period of time the university would be involved in providing in-service education, through workshops and seminars, organized for experienced teachers. Under such circumstances, the university may also aid in organizing educational exhibitions by displaying new materials, and new methods to up-date the skills of experienced teachers, who would, in turn, serve as resource persons for inductee teachers. Pre-service teachers could also become involved in the adoption arrangement by preparing audio-visual aids, arranging educational exhibitions, and offering services to the adopted schools. While this approach would serve to link pre-service, induction, and in-service -- the three phases of teacher education, it could also aid experienced teachers to keep current, and could result in easy transition for pre-service teachers. Finally, the adoption procedure could aid in bolstering teachers in the various experience groups.

Administrators ought to plan to reduce the discrepancy between what is and what ought to be. Administrators are viewed as key persons within school systems, who are responsible for the continuing education of teachers, and as such MacKay (1964) believes that they are in a good position to identify and determine worthwhile and relevant in-service activities which they, in cooperation with their staffs, and other resource persons, can develop.

In view of their role, administrators must identify staff in-service needs, and obtain, guide, and apply the necessary resources toward such ends. Administrators, in effect, are resource-linkers. In consequence, they ought to be aware of novel delivery systems, new educational technology, new materials, and be attuned to the social and educational forces which influence the constantly changing values of teachers, as well as students.

Administrators need to be skilled in interpersonal relationships, and well acquainted with adaptive processes in order to promote productive teacher participation in intentional in-service education planning. This way they can motivate and encourage teachers to assume the type of leadership which is necessary to organizational maintenance or change, as well as develop flexibility which could enhance and contribute positive results to innovations. Administrators who are skilled in interpersonal competence could contribute to the design of such staff development programs that would have more than peripheral impact on the teacher-participants, and on what occurs in teacher-participants' classrooms.

Intentional planning is essential to the effectiveness of an in-service program. It develops positive perceptions of participants with regard to the program. Beneveniste (1972:138) believes that intentional planning is an exercise in diplomacy, a demonstration of analytical skills, and a search for possible solutions which requires time, talent, and training. Time is essential for planning objectives and identifying needed topics (Osborne and Bowling (1977:148). Intentional planning of in-service education for experienced teachers suggests a problem-solving approach which initially identifies objectives, and possible alternatives to achieve such objectives. It is followed by selection of efficient and effective means of achieving such objectives. In this mode of planning, the relationship between objectives, alternatives, and means ought to be established. Succinctly, cooperative goal-directed or intentional planning of in-service education for experienced teachers is based on well-defined objectives, and workable alternatives for the optimal utilization of available resources. It includes a feasible program derived from real needs and is compatible with the expectations of teacher-participants.

Finally, cooperative and intentional planning may enable administrators, as significant implementors of in-service programs for experienced teachers, to espouse goals and values that emerge from the assessment of participants' needs. By so doing, the intended outcome of the program could be productive continuing education for experienced teachers.

CONCLUDING NOTE

This study, which was conducted with a sample of 120 experienced teachers, has revealed that experienced teachers want in-service education, but it must focus on: producing teachers who can deal with individual differences among students, producing teachers who can be versatile in using a variety of teaching techniques, producing teachers who can integrate theory with practice, producing adaptable teachers for work within existing school systems, producing teachers who are competent in interpersonal relationships, producing teachers who are knowledgeable in subject or content areas, and producing teachers who have the skills to implement change in schools.

The experienced teachers who participated in this study indicated that their preferred modes of instruction were discussing topics and issues, using a variety of teaching methods, and working in groups. In the view of these respondents, less time should be spent on listening to lectures and watching demonstrations. These respondents displayed preferences for more time to be devoted to the other instructional activities utilized in in-service programs planned for them. Participants in this study generally expressed the desire to have more input in all aspects of organizing in-service programs.

The respondents who participated in the present study perceived off-campus university courses to assist them most in meeting the objectives associated with knowledge, and next, with meeting the objectives associated with utilizing a variety of teaching techniques within their classrooms. On the other hand, school district-sponsored in-service activities were perceived to assist this group of respondents most with utilizing a variety of teaching techniques within their classrooms and with identifying problems associated with utilizing a variety of teaching techniques. Ranking next to these objectives which pertain to versatility, was the objective which was associated with acquiring new knowledge in subject or content areas for use within the classroom. The perceptions were, that off-campus university courses are strong in the area of knowledge, and school district-sponsored in-service activities are strong in the area of versatility. There are indications, however, that each context of in-service education duplicates certain services and assistance offered to teachers, by the other.

The present study has confirmed various findings of previous studies based on teachers' perceptions and preferences concerning in-service education. In addition, it has aided in identifying the types of instructional activities preferred by experienced teachers, the objectives which the two contexts of in-service education are most effective in assisting teachers meet within their schools, and the perceptions and preferences of experienced teachers concerning participation in organizing in-service programs. The present study has revealed that there is a critical lack of relationship between goals and ideals, and between experienced teachers' perceptions and preferences.

BIBLIOGRAPHY

BIBLIOGRAPHY

Alfonso, R.
1978 Alignments of Priorities for Teacher Education: A Status Report on Ontario Faculties of Education. Toronto: Council of Ontario Universities.

Almond, Gabriel A. and Bingham Powell
1978 Comparative Politics. (2nd Edition). Toronto: Little, Brown & Co.

Altmann, H., A. Herman and P. Clapp
1979 "Teacher Education is a Lifelong Process." A.T.A. Magazine. (November, 1979):38-39.

Baumel, Philip C. and Others
1967 The Community Survey. Iowa: Iowa State University of Science and Technology.

Beck, William M.
1977 "The Humanistic In-Service Coordinator." Journal of Teacher Education. 29 (November, 1978):7-10.

Bennis, Warren and Others
1977 The Planning of Change. (3rd Edition) New York: Holt, Rinehart and Winston.

Benveniste, Guy
1972 The Politics of Expertise. San Francisco, California: Boyd and Fraser.

Best, John
1959 Research in Education. Englewood Cliffs, N.J.: Prentice Hall.

Betz, L. & Others
1978 "South Dakota Teachers View In-Service Education." Phi Delta Kappan. (March, 1978):491-94.

Biddle, Bruce J. and W.J. Ellena (eds.)
1964 Contemporary Research in Teacher Effectiveness. New York: Holt, Rinehart and Winston.

Bishop, L.J.
1975 Staff Development and Instructional Improvement. London: Allyn and Bacon.

Bloom, B.S.
1976 Human Characteristics and School Learning. New York: McGraw-Hill.

Borg, W.R.
1963 Educational Research: An Introduction. New York: Donald McKay.

Boschee, Floyd and Dennis Hein.
1980 "How Effective is In-Service Education?" A Title I Report. Sioux Falls, South Dakota: Augustana College.

Brooks, S. and Others
1968 Partnership in Teacher Education. Washington, D.C.: AACTE.

Bunker, R. Mason
1977 "Beyond In-Service Toward Staff Renewal." Journal of Teacher Education, 28 (2):31.

Buros, Oscar K.
1972 Seventh Mental Measurement Yearbook. Highland Park, N.J.: Cryphon.

Campbell, J.P.
1973 "Research in the Nature of Organizational Effectiveness: An Endangered Species." A Paper Presented to the Conference on Occupational Research and The Navy Prospectus, 1980, San Diego.

Cane, Brian
1969 In-Service Training: A Study of Views and Preferences. London: N.F.E.R.

Clegg, Sir Alec.
1975 "Wooley Hall and In-Service Training in the West Riding" in Hopgood, M. (ed.). Supporting The Learning Teacher.

Cogan, Morris L.
1973 Clinical Supervision. Boston: Houghton Mifflin.

____
1975 "Current Issues in the Education of Teachers" in Ryan, K. (ed.). Seventy Fourth Yearbook of the National Society of the Study of Education Part 2. Chicago: The Society. pp. 204-209.

Cushman, M.L.
1977 The Governance of Teacher Education. Berkley: McCuthan Publishing Corporation.

Dalton, G., H. Thompson and R. Price
1977 "The Four Stages of Professional Careers: A New Look at Performance by Professionals" in Organizational Dynamics 6(1).

Dillon, Elizabeth
1977 "Staff Development: Bright Hope and Empty Promises." Educational Leadership 29 (1977).

Easton, D.
1966 A Systems Approach to Political Life. Indiana: Purdue University.

Edmonton Public School Board
1978 Professional Development Needs Assessment. Edmonton: Public School Board Research and Development.

Edwards, C.H. and Others
1977 Planning, Teaching and Evaluating: A Competency Approach. Chicago: Nelson Hall.

Faure, Edgar and Others
1972 Learning to be. Paris: UNESCO.

Ferguson, George A.
1971 Statistical Analysis in Psychology and Education. New York: McGraw-Hill.

Feyereisen, Kathryn, V., A. Florino and Arlene T. Nowak
1970 Supervision and Curriculum Renewal: A Systems Approach. New York: Appleton-Century-Crofts.

Finlay, Audrey J.
1978 "Designing an In-Service Program." (Unpublished Master's Thesis, University of Alberta, Edmonton, Canada.)

Florio, D. and R. Koff
1977 Model State Legislation. Continuing Professional Education for School Personnel. Washington, D.C.: N.I.E.

Gidney, Robert, Philip Lunden and Geoffrey Milburn.
1974 "Continuing Education: A Neglected Concept," in Myers, D. and F. Reid (eds.). Educating Teachers: Critiques and Proposals, Symposium Series 4. Toronto: OISE.

Good, Carter V.
1972 Essentials of Educational Research. New York: Appleton-Century-Crofts.

Hall, G.E. and Others
1975 "Levels of the Use of Innovation: A Framework for Analysing Innovation Adoption" in Journal of Teacher Education 26(1): 52-6.

Harder, Jacob O.
1970 "Institute and Individualized In-Service Education Programs Designed to Orient Teachers to an Industrial Arts Curriculum" (Unpublished Doctoral Dissertation, Wayne State University).

Harris, Ben M., Kenneth Wailand and E. McIntyre.
1969 In-Service Education: A Guide to Better Practice. Englewood Cliffs, N.J.: Prentice Hall.

Hass, G.
1957 "In-Service Education Today," in Fifty-sixth Yearbook of the National Society for the Study of Education Part I, p. 13.

Havelock, R.G.
1973 A Charge Agent's Guide to Innovations. Englewood Cliffs, N.J.: Educational Technology Publications.

Hopgood, M. (ed.).
1975 Supporting the Learning Teacher: A Source-book for Teacher Centres. New York: Agathon.

Horowitz, Myer
1972 "Teacher Education: Souffle de Fromage or Cheese Omelet?" A Paper based in part on presentations sponsored by the Western Canada Association on Student Teaching held in Edmonton, March, 1972 and by the Ontario Association in Toronto, May, 1972.

____
1978 "The Continuing Education of Teachers." An address presented at the Atlantic Institute of Education.

Hosford, P.L. and Others
1975 In-Service Education Programs to Improve Teaching Competence. Washington, D.C.: Association of Teacher Educators.

Immegart, G.L. and F.J. Pilecki
1973 An Introduction to Systems for Educational Administration. Ontario: Addison-Wesley.

Ingram, E.J.
1972 "Adaptive Functions and Skills in Educational Systems" in Ingram, E.J. and R.G. McIntosh. Adaptive Processes in Educational Organization - Introduction to Planned Change. I:5-22.

In Service Teacher Education in the Carribean
1977 London: Commonwealth Secretariat.

Jarolimek, J.
1970 "A Model for In-Service Education." Social Education 34 (1970):329-32.

Johnson, D.J.
1971 *Teachers' In-Service Education*. Toronto: Pergamon.

Journal of Teacher Education
1977 "Lifelong Learning for Professionals," *27*(2).

____
1978 "Evaluating Pre-Service Teacher Competence," *24*(2).

____
1979 "In-Service Education Opportunities and Options," *30*(1).

Joyce, Bruce R. and Others
1976 *ISTE Report I, Issues to Face*. U.S.A.: National Centre for Educational Statistics and Teacher Corps.

Kahn, H.
1972 "The Role of Educational Support Services in In-Service Teacher Education in Britain" in *In-Service Education for Teachers in the Caribbean*. London: Commonwealth Secretariat.

____
1972 "The Role of Teachers Centres in Teacher Education in Britain" in *In-Service Education for Teachers in the Caribbean*. London: Commonwealth Secretariat.

Kershner, R.
1960 *A Survey of Systems Engineering*. *Tools and Techniques*. In Fayles, Charles, et al. *Operations Research and Systems Engineering*. Baltimore: John Hopkin's.

Kryzanowski, Kim
1980 "Goals for the 80s." *A.T.A. Magazine* (March, 1980):32.

Lacy, C.
1977 *The Socialization of Teachers*. London: Methuen.

Larson, Olaf Peter
1962 "In-Service Education in the School Divisions and Counties of Alberta." (Unpublished Doctoral Dissertation, University of Oregon)

Lawrence, Gordon
1974 "Patterns of an Effective In-service Education." Unpublished state of the Art Paper. Tallahasse, Florida: State Department of Education.

Luke, Robert A.
1976 "Collective Bargaining and In-Service Education" in *Phi Delta Kappan* (March, 1976):468-70.

Mackay, D.A.
1964 "In-Service Education: A Strategy for Staff Development." A paper presented at the Alberta Principals' Leadership Course in 1964.

Mawby, R.
1972 "A Foundation Executive Views the Future and Continuing Education." Journal of Extension 10(1):16.

McComas, J.D.
1972 "Educational Reform through Continuing Education." New Campus 25(1972):5.

McIntosh, J.
1976 "The First Year of Experience: Influences on the Beginning Teacher." (Unpublished Doctoral Dissertation, University of Toronto, Canada)

McNamara, J.
1972 Effective Program for Teacher Aide Training. New York: West Nyac.

Miles, B.
1964 Innovations in Education. New York: Teachers' College Press, Columbia University.

Miller, P.L.
1970 "Innovations and Change in Education." Educational Leadership 27 (1970): 339-40.

Milstein, Mike, and James Belasco.
1973 Educational Administration and the Behavioral Sciences: A System Perspective. Boston: Allyn and Bacon.

Morrish, I.
1976 Aspects of Educational Change. London: George Allyn and Unwin.

Naciuk, W.
1968 "An Analysis of the Effectiveness of a Methods In-Service Program for Certain Teachers of Mathematics 20." (Unpublished Master's Thesis, The University of Alberta, Edmonton, Canada)

Osborne, A. and J.M. Bowling
1977 "The Context of In-Service Education" in Osborne, A. (ed.). An In-Service Handbook for Mathematics Education. Virginia: N.C.T.M., pp. 12-58.

Pilecki, F.J.
1972 "Where Teacher Education Fits In." Eric Document -- ED 059 010.

Powell, Douglas R.
1974 Continuing Teacher Education: The University's Role. Evanston, Illinois: Northwestern University.

Ratsoy, E.W.
1965 "A Comparative and Cross-sectional Study of Attitudes of Prospective Teachers." (Unpublished Doctoral Dissertation, The University of Alberta, Edmonton, Canada).

Ratsoy, E.W. and Others
1979 Skills of Beginning Teachers and Perceived Effectiveness of Preparation Programs. Edmonton: The University of Alberta.

Ready, L.M.
1974 Teacher Education: A Summary of the 1974 Public Conference on Teacher Preparation. Saskatchewan: Board of Teacher Education.

Regan, Kevin
1975 Teacher Education: Seventy-fourth Yearbook of the National Society for the Study of Education. Chicago: NSSE.

Reilly, V., and M. Dembo
1975 "Teachers' View of In-Service Education: A Question of Confidence." Phi Delta Kappan (October, 1975):126.

Roe, W.H. and T.H. Drake.
1974 The Principalship. New York: Macmillan.

Romano, M.
1977 "In-Service Education: The Need for Continuous Teacher Education." Phi Delta Gamma (Spring, 1977):8-15.

Rubin, L.J.
1971 Improving In-Service Education: Proposals and Procedures. Boston, Mass.: Allyn and Bacon.

Saunders, J.O. and Others
1975 Helping the Teacher. South Dakota: Adapt.

Schatzman, R. and A.L. Strauss
1973 Field Research. Englewood Cliffs, N.J.: Prentice Hall.

Scheffe, H.A.
1959 The Analysis of Variance. New York: Wiley.

Schein, Edgar H.
1972 Professional Education: Some New Directions. New York: McGraw-Hill.

Schreiber, F.O.
1975 "In-Service Education Preferences of Teachers and Administrators in Alberta." (Unpublished Doctoral Dissertation, University of Montana)

Skager, R.
1978 Lifelong Education and Evaluation Practice. Toronto: Pergamon.

Smith, B.O. and Others
1968 Teachers for the Real World. Washington, D.C.: A.A.C.T.E.

Steers, Richard M.
1977 Organizational Effectiveness: A Behavioral View. U.S.A.: Goodyear.

Stewart, L.D.
1966 "A Study of In-Service Educational Opportunities Available to Beginning Teachers in Alberta." (Unpublished Doctoral Dissertation, University of Colorado)

Taber, H.
1965 "Techniques of In-Service Training." Social Education, 29 (Nov., 1965):264-76.

Taylor, P.H.
1970 How Teachers Plan Their Course. N.F.E.R.

Teacher Training and Education.
1972 (D.E.S.) (James Report). London: H.M.S.O.

Thompson, Robert B.
1971 A Systems Approach to Instruction. Hampden, Connecticut: Shoe String Press.

Thurber, John C.
1975 "School-based Staff Development." Florida Schools (April, 1975):4.

Tuckman, B.W.
1967 "The Development and Testing of an Evaluation Model for Vocational Pilot Programs," Final Report. New Brunswick, N.J.: Rutgers University.

____
1978 Conducting Educational Research. New York: Harcourt, Brace, Javanovich.

Turner, William
1970 "Improved In-Service: A Challenge for Supervisors." The Clearing House, 5 (October, 1970):116-19.

UNESCO
1976 Exploring New Directions in Teacher Education. Bangkok.

Van Dalen, D.B.
1973 Understanding Educational Research: An Introduction. New York: McGraw-Hill.

Van Gigch, John P.
1974 Applied General Systems Theory. San Francisco: Harper and Row.

Watkins, Roger (ed.).
1973 In-Service Training Structure and Content. London: Wardlock.

Watson, G. (ed.)
1967 Change in School Systems. Washington, D.C.: N.E.A.

Warwick, D.
1975 School-Based In-Service Education. London: White Friars.

Wayland, Sloan and Others
1956 Aid to Community Analysis for the School-Administrator. New York: Bureau of Publications, Teachers' College.

Westbury, Robert C.P.
1975 "Curriculum Development: A Model." (Unpublished Doctoral Dissertation, Florida State University, College of Education)

Wiersma, W.
1973 Understanding Educational Research: An Introduction. New York: McGraw-Hill.

____
1975 Research Methods in Education: An Introduction. (2nd Edition) Ithaca, Ill.: Peacock.

Wise, John E. and Others
1967 Methods of Research in Education. Boston, D.C.: Heath.

Wiseman, S. and D. Pidgeon.
1970 Curriculum Evaluation. N.F.E.R.

Yarger, G. and M. Brannigan
1979 "A Survey of Teachers' Perceptions of University Courses." A Paper presented to the A.E.R.A. Conference held in San Francisco, California, April, 1979.

Zigarmi, P. and Others
1977 "Degree of Usefulness of Selected Types of In-Service as are Perceived by In-Service Teachers." Educational Leadership (April, 1977):545-550.

Zudeck, S. and M. Blood
1974 Foundations of Behavioral Science Research in Organizations. Michigan: Ann Arbor.

APPENDICES

APPENDIX A

THE INSTRUMENTS

TEACHER QUESTIONNAIRE

A Study of In-Service Education Preferences and Perceptions

This questionnaire is a survey of teachers' preferences for and perceptions of in-service teacher education. The purpose of this study is to (a) compare teachers' perceptions and preferences for off-campus* university courses and school district** sponsored in-service activities and (b) to report the information derived from the data with a view to assisting administrations in the planning of in-service programs for teachers. All the questions have been so formulated that you may give your answer quickly and easily. Please circle the number which best reflects your perception which means "what is" (Real) and your preference which means "what should be" (Ideal).

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* Off-campus university course - a course offered in the evenings or weekends by the University of Alberta to teachers outside the corporate limits of Edmonton.

** School district/Division/County sponsored (Professional Development Days, etc.).

TEACHER QUESTIONNAIRE

PART I - CHARACTERISTICS

Directions:

Please circle the number to the right of each of the following responses as it applies to you.

1. Sex:

Male	1
Female	2

2. Your age group:

20-25 years	1
26-35 years	2
36-45 years	3
46-55 years	4
56-65 years	5

3. Completed years of teacher education for salary purpose:

None	1
One	2
Two	3
Three	4
Four	5
Five	6
Six	7
More than six	8

4. Years of teaching experience:

None	1
1-5	2
6-10	3
11-15	4
16-20	5
Over 20	6

5. Grade level(s) taught most often:

Kindergarten	1
Elementary	2
Junior High	3
Senior High	4
Resource	5
Substitute teacher	6
Other (please specify)	7

6. Level of education or highest degree held:

Less than Bachelor's	1
Bachelor's (one or more)	2
Graduate Diploma	3
Master's	4
Doctorate	5

(over)

7. What is your major area of teaching concentration?

____

8. How many off-campus university courses have you taken altogether from the University of Alberta?

One	1
Two	2
Three	3
Four	4
Other (please specify) __________	5

9. Specify by number and provide a brief description of the most recent off-campus university course that you have taken from the University of Alberta:

Number of course ______________________________

Description of course ___________________________

____

____

____

10. When did you take the course described in 9 above?

Before 1976-1977	1
1976-1977	2
1977-1978	3
1978-1979	4
Other (please specify) __________	5

11. Indicate the nature of the most recent school-district sponsored in-service activity in which you have been involved, and give an estimate of the time scheduled for this activity.

Nature of activity ______________________________

Total scheduled time devoted to the activity

____ hours

PART II

SECTION A: GOALS AND IDEALS OF IN-SERVICE TEACHER EDUCATION

In your opinion, how important should the following ideals of in-service teacher education be?

		IDEAL					
		None/Little	Some	Moderate	Great	Very Great	Cannot Answer
1.	To produce teachers who are knowledgeable in subject or content areas.	1	2	3	4	5	x
2.	To produce adaptable teachers for work within existing school systems.	1	2	3	4	5	x

(over)

		IDEAL					
		None/Little	Some	Moderate	Great	Very Great	Cannot Answer
3.	To produce teachers who are competent in interpersonal relationships.	1	2	3	4	5	x
4.	To produce teachers who can integrate theory with practice.	1	2	3	4	5	x
5.	To produce teachers who have the skills to implement change in schools.	1	2	3	4	5	x
6.	To produce teachers who can be versatile in using various teaching techniques.	1	2	3	4	5	x
7.	To produce teachers who can deal effectively with individual differences.	1	2	3	4	5	x
8.	Other (please specify) ______________________________	1	2	3	4	5	x

In your opinion, how important are (Real) each of the following goals of off-campus university courses and school district-sponsored in-service activities, in which you have participated?

		REAL											
		OFF-CAMPUS						SCHOOL DISTRICT					
		None/Little	Some	Moderate	Great	Very Great	Cannot Answer	None/Little	Some	Moderate	Great	Very Great	Cannot Answer
9.	To make teachers more knowledgeable in subject or content areas.	1	2	3	4	5	x	1	2	3	4	5	x
10.	To make teachers more adaptable to work within existing school systems.	1	2	3	4	5	x	1	2	3	4	5	x

(over)

		REAL											
		OFF-CAMPUS						SCHOOL DISTRICT					
		None/Little	Some	Moderate	Great	Very Great	Cannot Answer	None/Little	Some	Moderate	Great	Very Great	Cannot Answer
11.	To increase the interpersonal skills of teachers	1	2	3	4	5	x	1	2	3	4	5	x
12.	To increase the ability of teachers to integrate theory with practice	1	2	3	4	5	x	1	2	3	4	5	x
13.	To assist teachers to develop the necessary skills to implement change within schools.	1	2	3	4	5	x	1	2	3	4	5	x
14.	To assist teachers who will be able to use various teaching techniques.	1	2	3	4	5	x	1	2	3	4	5	x
15.	To assist teachers to deal effectively with individual differences.	1	2	3	4	5	x	1	2	3	4	5	x
16.	Other (please specify as per 8 above) ____________________	1	2	3	4	5	x	1	2	3	4	5	x

(over)

SECTION B: OBJECTIVES OF IN-SERVICE EDUCATION

How effective was the off-campus university course or school district-sponsored in-service activity specified in 9 and 11 above in assisting you in meeting the following objectives?

		OFF-CAMPUS COURSE						SCHOOL DISTRICT IN-SERVICE ACTIVITY					
		Not Effective	Somewhat Effective	Moderately Effective	Quite Effective	Very Effective	Cannot Answer	Not Effective	Somewhat Effective	Moderately Effective	Quite Effective	Very Effective	Cannot Answer
17.	Identifying problems associated with the acquisition of knowledge in subject or content areas?	1	2	3	4	5	x	1	2	3	4	5	x
18.	Acquiring new knowledge in your subject or content areas for use in the classroom?	1	2	3	4	5	x	1	2	3	4	5	x
19.	Identifying problems associated with adapting to work within your school system?	1	2	3	4	5	x	1	2	3	4	5	x
20.	Adapting better to work within your school system?	1	2	3	4	5	x	1	2	3	4	5	x
21.	Identifying problems associated with interpersonal competence?	1	2	3	4	5	x	1	2	3	4	5	x

(over)

		OFF-CAMPUS COURSE						SCHOOL DISTRICT IN-SERVICE ACTIVITY					
		Not Effective	Somewhat Effective	Moderately Effective	Quite Effective	Very Effective	Cannot Answer	Not Effective	Somewhat Effective	Moderately Effective	Quite Effective	Very Effective	Cannot Answer
22.	Demonstrating interpersonal competence?	1	2	3	4	5	x	1	2	3	4	5	x
23.	Identifying problems associated with the integration of theory with practice?	1	2	3	4	5	x	1	2	3	4	5	x
24.	Integrating theory with practice in the classroom?	1	2	3	4	5	x	1	2	3	4	5	x
25.	Identifying problems associated with implementing program changes within your school?	1	2	3	4	5	x	1	2	3	4	5	x
26.	Implementing program changes within your school?	1	2	3	4	5	x	1	2	3	4	5	x
27.	Identifying the advantages associated with utilizing a variety of teaching techniques?	1	2	3	4	5	x	1	2	3	4	5	x
28.	Utilizing a variety of teaching techniques within your classroom?	1	2	3	4	5	x	1	2	3	4	5	x
29.	Identifying problems associated with dealing with individual differences among students?	1	2	3	4	5	x	1	2	3	4	5	x
30.	Dealing with individual differences among students?	1	2	3	4	5	x	1	2	3	4	5	x

(over)

SECTION C: INSTRUCTIONAL PRACTICE

To what extent did the following activities lend themselves to meeting the objectives given in 17-30 above in your most recent off-campus university course and school district-sponsored in-service activity?

		OFF-CAMPUS						SCHOOL DISTRICT					
		None/Little	Some	Moderate	Great	Very Great	Cannot Answer	None/Little	Some	Moderate	Great	Very Great	Cannot Answer
31.	Listening to lectures and watching demonstrations.	1	2	3	4	5	x	1	2	3	4	5	x
32.	Discussing topics and issues.	1	2	3	4	5	x	1	2	3	4	5	x
33.	Working in groups.	1	2	3	4	5	x	1	2	3	4	5	x
34.	Having the opportunity to try out a variety of teaching methods.	1	2	3	4	5	x	1	2	3	4	5	x
35.	Working individually on issues and problems initiated or organized by teacher-participants.	1	2	3	4	5	x	1	2	3	4	5	x
36.	Receiving instruction through self-teaching, printed or audio-visual materials.	1	2	3	4	5	x	1	2	3	4	5	x
37.	Field trips.	1	2	3	4	5	x	1	2	3	4	5	x
38.	Engaging in role playing or other simulated activities.	1	2	3	4	5	x	1	2	3	4	5	x
39.	Other (please specify) ______________________.	1	2	3	4	5	x	1	2	3	4	5	x

(over)

Generally speaking, how much time did (Real) you spend, and should (Ideal) experienced teachers spend on the following in-service activities associated with your most recent off-campus university course?

		REAL						IDEAL					
		None/Little	Some	Moderate	Quite a Bit	A Great Deal	Cannot Answer	None/Little	Some	Moderate	Quite a Bit	A Great Deal	Cannot Answer
40.	Listening to lectures or watching demonstrations.	1	2	3	4	5	x	1	2	3	4	5	x
41.	Discussing topics and issues.	1	2	3	4	5	x	1	2	3	4	5	x
42.	Working in groups.	1	2	3	4	5	x	1	2	3	4	5	x
43.	Having an opportunity to try out a variety of teaching methods.	1	2	3	4	5	x	1	2	3	4	5	x
44.	Working individually on issues and problems which teachers initiated or organized.	1	2	3	4	5	x	1	2	3	4	5	x
45.	Receiving instruction through self-teaching, audio-visual or printed materials.	1	2	3	4	5	x	1	2	3	4	5	x
46.	Field trips.	1	2	3	4	5	x	1	2	3	4	5	x
47.	Engaging in role playing or other simulated activities.	1	2	3	4	5	x	1	2	3	4	5	x
48.	Other (please specify) ______________________.	1	2	3	4	5	x	1	2	3	4	5	x

(over)

Generally speaking, how much time did (Real) you spend, and should (Ideal) experienced teachers spend on the following activities associated with your most recent school district - sponsored in-service activities?

		REAL						IDEAL					
		None/Little	Some	Moderate	Quite a Bit	A Great Deal	Cannot Answer	None/Little	Some	Moderate	Quite a Bit	A Great Deal	Cannot Answer
49.	Listening to lectures or watching demonstrations.	1	2	3	4	5	x	1	2	3	4	5	x
50.	Discussing topics and issues.	1	2	3	4	5	x	1	2	3	4	5	x
51.	Working in groups.	1	2	3	4	5	x	1	2	3	4	5	x
52.	Having the opportunity to try out a variety of teaching methods.	1	2	3	4	5	x	1	2	3	4	5	x
53.	Working individually on issues and problems which teachers initiated or organized.	1	2	3	4	5	x	1	2	3	4	5	x
54.	Receiving instruction through audio-visual, printed or self teaching materials.	1	2	3	4	5	x	1	2	3	4	5	x
55.	Field trips.	1	2	3	4	5	x	1	2	3	4	5	x
56.	Engaging in role playing or any other simulated activities.	1	2	3	4	5	x	1	2	3	4	5	x
57.	Other (please specify) ______________________.	1	2	3	4	5	x	1	2	3	4	5	x

(over)

SECTION D: THE ROLE OF THE PRACTISING TEACHER IN ORGANIZING IN-SERVICE TEACHER EDUCATION PROGRAMS

To what extent do (Real) and should (Ideal) experienced teachers participate in organizing off-campus university courses in:

		REAL						IDEAL					
		None/Little	Some	Moderate	Quite a Bit	A Great Deal	Cannot Answer	None/Little	Some	Moderate	Quite a Bit	A Great Deal	Cannot Answer
58.	Defining the goals.	1	2	3	4	5	x	1	2	3	4	5	x
59.	Setting the objectives.	1	2	3	4	5	x	1	2	3	4	5	x
60.	Determining the course content.	1	2	3	4	5	x	1	2	3	4	5	x
61.	Determining the mode of delivery.	1	2	3	4	5	x	1	2	3	4	5	x
62.	Evaluating the course.	1	2	3	4	5	x	1	2	3	4	5	x
63.	Other (please specify) ________________.	1	2	3	4	5	x	1	2	3	4	5	x

To what extent do (Real) and should (Ideal) experienced teachers participate in organizing school-district sponsored in-service activities in:

		REAL						IDEAL					
		None/Little	Some	Moderate	Quite a Bit	A Great Deal	Cannot Answer	None/Little	Some	Moderate	Quite a Bit	A Great Deal	Cannot Answer
64.	Defining the goals.	1	2	3	4	5	x	1	2	3	4	5	x
65.	Setting the objectives.	1	2	3	4	5	x	1	2	3	4	5	x
66.	Determining the activity focus.	1	2	3	4	5	x	1	2	3	4	5	x

(over)

		REAL						IDEAL					
		None/Little	Some	Moderate	Quite a Bit	A Great Deal	Cannot Answer	None/Little	Some	Moderate	Quite a Bit	A Great Deal	Cannot Answer
67.	Determining the mode of delivery.	1	2	3	4	5	x	1	2	3	4	5	x
68.	Evaluating the activity.	1	2	3	4	5	x	1	2	3	4	5	x
69.	Other (please specify) ____________________.	1	2	3	4	5	x	1	2	3	4	5	x

Please add comments, if you wish, on the back of this booklet.

THANK YOU FOR YOUR COOPERATION.

THE INTERVIEW GUIDE

This guide will be used to interview selected experienced teachers with a view to establishing their perceptions and preferences of off-campus university courses compared with school district-sponsored in-service activities.

Objective of the Interview

The objective of the interview will be to facilitate the acquisition of information concerning the weaknesses and strengths of the most recent in-service program in which respondent participated.

Types of Questions

Both broad and specific questions are included in the interview guide, as the researcher wishes to allow respondents to furnish willing and relevant information within their own frame of reference. Where necessary, the interview will resort to probing in order to stimulate discussion, and thus obtain more information. All questions will be posed in the same order, and the interviews will be edited immediately after they have been taped, as at that time, the situation will still be clear in the interviewer's mind.

Pilot Testing

The interview guide will be pilot tested in the month of September, 1979.

THE GUIDE

A Note to Respondents

The purpose of this interview is to obtain the opinions of experienced teachers concerning weaknesses and strengths of off-campus university courses and school district-sponsored in-service activities. The respondents were selected by the following criteria: geographical location, years of teaching experience, and type of school taught in, for example elementary, junior high and senior high.

In order to assist respondents in this brief interview, the following terms are defined:

Definition of Terms

1. School district: This term is used synonymously with county and school division or school jurisdiction.
2. In-service activities in this context, refer to activities sponsored by the superintendent or organized by teachers for the professional development of teachers within your school jurisdiction.
3. "Practising" and "experienced" teachers are used interchangeably.
4. Off-campus university course: A course offered in the evening credit or week-end programs to teachers outside the corporate limits of Edmonton.

Questions to be Asked

1. Consider your participation in in-service teacher education within your school district. Relate what you would say were (a) the strengths, and (b) the weaknesses.

____

____

2. Do off-campus university courses help you or other teachers to develop the skills mentioned in question one? If yes, please answer question 3. If no, please explain?

3. Which of the following areas would you like to have stressed in off-campus university courses or school district-sponsored in-service activities? Please check your answer in the box provided.

	School-district	Off-campus
1. New methods and strategies	☐	☐
2. How to use teaching aids	☐	☐
3. Interpersonal skills	☐	☐
4. Managerial skills	☐	☐
5. How to adapt to change	☐	☐
6. Other (please specify)	☐	☐

4. Would you say that off-campus university courses and school district-sponsored in-service activities are worthwhile? If no, please explain. If yes, please give reasons.

School-district:

Off-campus:

5. Of off-campus university courses and school district-sponsored in-service activities, which do you prefer. Why? Please explain.

6. Consider off-campus university courses and school district-sponsored in-service activities. What five changes would you like to see in their design and/or delivery format? Please expand.

Off-campus courses

Design:

Delivery Format:

School district-sponsored in-service

Design:

Delivery Format:

7. Could you give five reasons for the weaknesses and strengths of in-service related in Question 1?

Reasons:

1.
2.
3.
4.
5.

8. Are there any teachers in your school jurisdiction who have been influential in changing off-campus university courses or school district-sponsored in-service activities? If yes, what was the nature of the change? If no, please go to question #9.

9. What contribution, in your view, should experienced teachers make in planning and designing of off-campus university courses or school district-sponsored in-service activities? Please explain in the space provided below:

Off-campus: ______________________________

____

____

____

School district: ______________________________

____

____

____

Part II - Personal Data

In which of the following categories do you fall? Please circle the correct number:

10. Age Group

20-24	1
26-35	2
36-45	3
46-55	4
56-65	5
65-over	6

11. Centre

One	1
Two	2
Three	3
Four	4
Five	5

12. Level of Education

Less than Bachelor's	1
Bachelor's	2
Graduate Diploma	3
Master's	4
Doctorate	5
Other	6

13. Years of Experience

None	1
1-5	2
6-10	3
11-15	4
16-20	5
over 20	6

14. Grade Levels Taught Most Often:

Elementary	1
Junior High	2
Senior High	3

THANK YOU FOR YOUR COOPERATION

APPENDIX B

LETTER SEEKING PERMISSION AND LETTER OF RESPONSE TO ADAPT THE GIL STUDENT QUESTIONNAIRE

c/o The Department of
Educational Administration
The University of Alberta
Edmonton, Canada

June 5, 1979

Dr. Michael Fullan

The Ontario Institute for Studies
in Education
Toronto, Ontario

Dear Dr. Fullan:

I am a Ph.D. student in Educational Administration at the University of Alberta, Edmonton. For my dissertation, I wish to investigate Teacher Preferences and Perceptions of In-service Education.

The (GIL) Student Questionnaire revised by you and your associates for the study of Teacher Education in Canada, could, if adapted, be used as the instrument for my study. Could you therefore permit me to adapt this instrument for the purpose of my study?

Thank you in acticipation.

Sincerely yours,

(Miss) Gloria V. Burke

cc: Dr. Marvin Wideen

THE ONTARIO INSTITUTE FOR STUDIES IN EDUCATION
252 BLOOR STREET WEST, TORONTO, ONTARIO, CANADA M5S 1V6 TELEPHONE 923-6641

August 3, 1979

Miss Gloria V. Burke
c/o Department of Educational
Administration
The University of Alberta
Edmonton, Alta.

Dear Gloria:

I am sorry for taking so long to respond to your request on the GIL, but holidays and Vancouver/Toronto communication has been a problem.

The answer to your request is 'Yes', we would be pleased to see you adapt our questionnaire for your dissertation. Our only condition is that you provide us with a copy of a description of the study, the questionnaire and the results.

Good luck in your work.

Yours truly,

Michael

Michael Fullan
Chair
Department of Sociology
MF/jw.

cc: Dr. Marvin Wideen

APPENDIX C

LETTERS SEEKING PERMISSION AND LETTER OF RESPONSE TO CONDUCT THE STUDY AT FIVE OFF-CAMPUS CENTRES IN ALBERTA

September 7, 1979

Mr. L. Carswell
Coordinator of Special Sessions
The University of Alberta
Edmonton, Alberta

Dear Mr. Carswell:

I am a graduate student reading for a Ph.D. degree in the Department of Educational Administration at this University, and my dissertation topic is "Teachers' Perceptions and Preferences Concerning Off-Campus University Courses with School District-Sponsored In-Service Education Activities."

Due to the nature of my study, I shall need to distribute questionnaires to practising teachers who are students at five off-campus centres, this fall. I am seeking your permission to distribute these questionnaires, and shall seek the permission of course instructors as well. The Dean of the Faculty of Education has already been contacted on the matter. Enclosed are copies of the letters sent to the Dean and course instructors.

Thank you in anticipation.

Sincerely yours,

(Miss) Gloria Burke

GB/pk
Encl.

INTER-DEPARTMENTAL CORRESPONDENCE

TO Miss Gloria Burke
Dept. of Educational Administration

DATE September 17, 1979

FROM K.L. Carswell, Director
Special Sessions

Re: Instructors in the Evening Credit
Program (Off-Campus) 1979-80

This will confirm our conversation of September 4, 1979 concerning the information you requested on the Evening Credit Program (Off-Campus) 1979-80.

Unfortunately University regulations prevent the release of the student names and addresses you originally requested. However at your request I have supplied you with the names of the instructors teaching in the 1979-80 session in order that you may contact them to see if they would be prepared to distribute the questionnaire to their students.

As I indicated this would be at the discretion of each instructor and care must be taken to ensure that it does not interfere with the normal activities of the class.

If we can be of any further assistance please let me know.

Sincerely yours,

K.L. Carswell, Director
Special Sessions

KLC/eb

January 24, 1980

Dr. W. Worth
Dean of the Faculty of Education
The University of Alberta
Edmonton, Alberta

Dear Dr. Worth:

Early last Fall, I approached you seeking permission to distribute questionnaires related to my study of "Teachers' perceptions and preferences concerning off-campus university courses and school district-sponsored in-service activities," to teachers taking off-campus courses from the University of Alberta.

Through the assistance of course instructors and local contact persons in the districts selected for my study I have been able to distribute the questionnaires. The enclosed copy is for your perusal.

When the study is completed, I shall send you a copy of the dissertation.

Sincerely yours,

Gloria V. Burke

September

Dear

I understand that you are the instructor of an off-campus University course being offered at this fall. I would like to enlist your assistance and cooperation in distributing questionnaires to the teachers who are enrolled in your course, on October , 1979.

The purpose of the questionnaire is to gather data for my research project, which is entitled "Teachers' Perceptions and Preferences Concerning Off-Campus University Courses and School District-Sponsored In-Service Education Activities."

Both the Dean of the Faculty of Education and the Coordinator of Special Sessions have been contacted on the matter. The letter to the Special Sessions Coordinator is enclosed for your scrutiny.

Thank you in advance.

Sincerely yours,

(Miss) Gloria V. Burke

APPENDIX D

LETTERS TO RESPONDENTS

PILOT STUDY AND TIMING OF THE QUESTIONNAIRE

The Department of Educational
Administration
The University of Alberta
Edmonton, Alberta

December 12, 1979

Dear

I am a doctoral student in the Department of Educational Administration at the University of Alberta.

For my dissertation, I am investigating the "Preferences and Perceptions of Experienced Teachers" with regard to off-campus university courses and school district-sponsored education activities.

The enclosed questionnaire is the instrument that I propose to use for my study, and I would appreciate your assistance in:

(a) completing it,
(b) stating the time you have taken to complete it,
(c) making any suggestions which you think might improve it for the study, and
(d) returning the completed instrument to me in the enclosed envelope.

As this is a pilot study, I am asking persons who have taken Evening credit courses on or off campus to complete the questionnaire. Your course instructor who has signed this letter has permitted me to distribute this questionnaire to you.

Thank you in anticipation for your assistance.

Sincerely yours,

Gloria V. Burke

COVER LETTER WITH INSTRUMENT TO COLLECT THE DATA FOR THE STUDY

FACULTY OF EDUCATION
DEPARTMENT OF EDUCATIONAL
ADMINISTRATION

THE UNIVERSITY OF ALBERTA
EDMONTON, CANADA
T6G 2G5

January 14, 1980

Dear

I am a Ph.D. student in the Department of Educational Administration at the University of Alberta, and I am in the process of doing my thesis on "Teachers' Perceptions and Preferences of In-service Education" - off-campus university courses and school district-sponsored in-service activities (Professional Development Days etc.).

This study is authorized by the University and is aimed specially at teachers who have taken off-campus University courses at five randomly selected centres. Since you have taken off-campus university courses, your support would be invaluable and would help add to knowledge in the area of in-service education in Alberta.

I would appreciate your assistance and cooperation in completing the enclosed questionnaire and returning it to me by January 31, 1980.

This request is personal and confidential and the information which you provide will be used solely for the purposes of this study.

Thank you in anticipation for your assistance and cooperation.

Sincerely yours,

(Miss) Gloria V. Burke

GVB/sl

FIRST FOLLOW-UP LETTER

FACULTY OF EDUCATION
DEPARTMENT OF EDUCATIONAL
ADMINISTRATION

QUAECUMQUE VERA

THE UNIVERSITY OF ALBERTA
EDMONTON, CANADA
T6G 2G5

February 1, 1980

Dear :

On January I mailed a questionnaire to you. This questionnaire relates to a study of teachers' perceptions and preferences concerning University of Alberta off-campus courses and school district-sponsored in-service activities.

The results of this study should prove useful to individuals and organizations in designing in-service activities for teachers in Alberta. In this regard, your kind cooperation in completing and returning the questionnaire is desired, and will be appreciated.

If you have already completed and returned the questionnaire, please accept my gratitude. If you have not yet returned the completed questionnaire, I would appreciate your doing so. It will take only 20 minutes of your time to do it, and you are assured that your response will be treated confidentially.

Should you need any further information please feel free to call me collect at: 439-1556 any morning between the hours of 8:00 and 10:00.

Thank you in anticipation for your cooperation.

Sincerely yours,

Gloria V. Burke

GCB/jmt

SECOND FOLLOW-UP LETTER

c/o The Department of
Educational Administration
The University of Alberta
Edmonton, Alberta

February 25, 1980

Dear Colleague:

Sometime in January a questionnaire which related to a study of teachers' perceptions and preferences concerning off-campus courses offered by the University of Alberta, and school district sponsored in-service activities, was mailed to you. To date I have not received your completed copy of the questionnaire.

If you have already completed and returned your copy of the questionnaire, I wish to thank you for your cooperation. However, in case you have mislaid the first questionnaire, I am enclosing a second copy which I am requesting that you complete and return to me by March 4.

It is important that I receive your completed questionnaire, as a high rate of return will add to the validity of my study. Therefore, may I ask that you complete the enclosed questionnaire and return it to me without delay?

Thank you in advance.

Sincerely yours,

Gloria V. Burke
Ph.D. Candidate

GVB/jmt
Encl.

LETTER TO CONFIRM THE DISCUSSION WITH REGARD TO INTERVIEWING RESPONDENTS

February 25, 1980

Dear :

Pursuant to our recent telephone discussion, I wish to thank you for agreeing to participate in the interview related to my study "Teachers' Perceptions and Preferences Concerning University of Alberta Off-Campus Courses and School District-Sponsored In-Service Activities."

I would appreciate your completing the attached form and returning it to me without delay. A stamped, self-addressed envelope is enclosed for your convenience.

Thanks in advance.

Yours truly,

(Miss) Gloria V. Burke

GVB/jmt
Encl.

APPENDIX E

LETTERS OF REQUEST AND THANKS FOR MAILING LISTS

c/o The Department of Educational
Administration
The University of Alberta,
Edmonton, Alberta

October 2, 1979

Dear

I am conducting a survey to establish the perceptions and preferences of experienced teachers with regard to off-campus university courses and school district-sponsored in-service activities. This study is related to my Ph.D. project.

I would appreciate your assistance in obtaining the names and addresses of about 30 teachers, within your area, who have taken off-campus university courses from the University of Alberta within the last 3 years: 1976-1977; or 1977-1978, 1978-1979, and/or 1979-1980.

When the study is complete, I shall be happy to send you a copy of the findings.

Thank you in anticipation.

Sincerely yours,

(Miss) Gloria V. Burke

January 25, 1980

Dear

Thank you very much for assisting me in compiling a mailing list of teachers who have taken off-campus university courses from the University of Alberta.

This mailing list will help me to reach teachers for a study related to the perceptions and preferences of teachers concerning off-campus university courses and school district sponsored in-service activities.

It is hoped that this study will make some contribution to in-service teacher education in Alberta, and in this regard your cooperation has been invaluable.

I shall acknowledge your assistance in the dissertation, and will send you a copy of the findings.

Thanks again for your help.

Sincerely yours,

Gloria V. Burke
(Ph.D. Candidate)

APPENDIX F

INTERVIEW CONSENT FORM

INTERVIEW CONTENT FORM

1. Topic: "Teachers' Perceptions and Preferences Concerning Off-Campus University Courses and School-District Sponsored In-Service Activities"
2. Name of Interviewee:
3. Address of Interviewee:
4. Phone Number of Interviewee:
5. Place of Interview:
6. Date of Interview: March , 1980
7. Time of Interview: a.m. p.m.
8. Signature of Person Completing the Form: . . . .